

# The Mining Journal.

## RAILWAY AND COMMERCIAL GAZETTE.

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

[The Mining Journal is Registered at the General Post Office as a Newspaper, and for Transmission Abroad.]

No. 2563.—VOL. LIV.

LONDON, SATURDAY, OCTOBER 4, 1884.

WITH SUPPLEMENT. PRICE SIXPENCE. BY POST, £1 4s. PER ANNUM.

**MR. JAMES H. CROFTS, STOCK AND SHARE DEALER,**  
No. 1, FINCH LANE, CORNHILL, LONDON, E.C.  
ESTABLISHED 1842.

BUSINESS transacted in all descriptions of MINING STOCKS and SHARES (British and Foreign), Consols, Bonds (Foreign and Colonial), Railways, Insurance, Assurance, Telegraph, Tramway, Shipping, Canal, Gas, Water, and Dock Shares, and all Miscellaneous Shares.

BUSINESS negotiated in STOCKS and SHARES not having a general market value.

Every Friday a GENERAL and RELIABLE LIST issued (a copy of which will be forwarded on application), containing closing prices of the week.

MINES INSPECTED.

BANKERS: CITY BANK, LONDON.—SOUTH CORNWALL BANK, St. Austell.

TELEPHONE NUMBER 1003.

**SPECIAL DEALINGS** in the following (or part):—

100 Asia Minor, 2s. 9d.	50 Great Holway	70 Parys Copper, 1s. 3d.
100 Akankoo, 8s. 6d.	100 Guinea Coast Gold, 2s.	50 Phoenix United, 3s. 6d.
100 Almaden, 4s. 6d.	10 Great Laxey, 8s. 7s. 6	25 Panuclillo, 2s. 12s. 6d.
100 Bedford United, 2s. 9	50 Gunnislake (Olters), 9s.	50 Prince of Wales, 6s. 6d.
100 Balkis, 3s. 9d.	100 Hoover Hill, 5s.	300 Pasterana, 2s.
100 Bratsberg, 2s. 6d.	50 Home Mines Trust, 2s.	10 Rio Tinto, 2s. 12s. 9d.
100 Cankim Bamoo, 2s.	75 Indian Consols, 2s.	25 Ruby, 13s. 6d.
100 Carn Camborne, 2s.	100 Javali, 3s.	30 Richmond, 2s. 12s. 3d.
100 Callao Bie, 9s.	50 Kapsaga, 3s.	15 Roman Grav, 4s. 7s. 6
100 Chile Gold, 2s. 3d.	25 Kilifresh, 5s.	10 Schwab's Gully, 2s. 6
100 Colombian Hyd., 9s. 6	50 Kimberley N. Block, 2s. 2s. 6d.	100 Spitzkop, 11s. 3d.
100 Consolidated, 2s.	50 Kongsberg, 5s.	25 South Caradon, 13s. 6
100 California, 12s. 3d.	100 La Plata (New), 5s. 3	20 So. Condurow, 2s. 6
100 Colorado, 2s. 6d.	25 Leadhills, 21s. 6s. 3d.	50 South Devon Uni., 2s.
100 Canada Copper, 3s. 9d.	100 Lisbon-Berlyn, 6s.	50 So. Penrithall, 3s. 6d.
100 Chontales, 4s.	25 Marke Valley, 12s.	100 Tamboracherry, 6s. 3d.
100 Cor. South Australian Copper, 1s. 3d.	75 Michipicoten, 2s.	20 Tollma A., 2s. 6
100 Devala Moyer, 3s. 9d.	30 Mona, 5s.	50 Transvaal Gold, 20s.
100 Devon Con., 2s. 17s. 6	70 Montana, 32s.	50 Trevaunance, 37s.
100 Devon Friend., 2s. 6d.	50 Mounts Bay, 3s.	25 Uni. Mexican, 2s. 13s. 6
100 Dolcoath, 2s.	50 Mysore Gold, 12s. 3d.	100 Victoria Gold, 7s.
100 Don Pedro, 6s.	50 New Caradon, 1s. 9d.	100 Wheal Agar, 2s. 12s. 6
100 Drakewalls, 2s. 6d.	100 New Callao, 3s.	100 Wheal Basset, 2s. 12s. 6
100 Duchy Fer., 17s.	30 New Emma, 11s.	100 Wheal Coates, 2s. 6d.
100 East Blue Hills, 5s.	15 New Quebrada, 4s. 3s.	100 Wheal Crebor, 21s. 4s.
100 Eberhard, 6s.	25 New Kitty, 32s. 6d.	25 Wheal Killy, 2s. 6
100 East Caradon, 4s.	200 Nouveau Monde, 1s. 9	25 Wheal Silver & Lan-
100 East Lovell, 5s.	50 New W. Caradon, 4s.	tegiog, 3s.
100 East Wh. Rose, 3s. 3d.	100 Old Shepherds, 13s. 6	100 Wynad Persew., 1s. 3
100 Ecton, 20s.	50 Organo, 10s. 6d.	
100 El Callao, 2s. 12s. 6	50 Orlita, 22s.	
100 Frongoch, 17s.	75 Oscar, 10s. 6d., 20s.	
100 Frontino, 13s. 9d.	50 Oscar Vendors' Shares, 1s.	
100 Goginan, 1s. 9d.	50 Polberro, 39s.	
100 Gold Coast, 3s.	100 Potosi (New), 5s. 9d.	
100 Glenrock, 2s. 3d.	50 Port Phillip, 2s. 3d.	

\* \* \* SHARES SOLD FOR FORWARD DELIVERY (ONE, TWO, OR THREE MONTHS) ON DEPOSIT OF TWENTY PER CENT.

\* \* \* BUSINESS at CLOSURE PRICES in all Market TIN, COPPER, LEAD, GOLD, SILVER, and DIAMOND SHARES

JAMES H. CROFTS, 1, FINCH LANE, LONDON.

**RAILWAYS.—SPECIAL BUSINESS.**—Fortnightly Accounts opened on receipt of the usual cover.

JAMES H. CROFTS, 1, FINCH LANE, LONDON.

**FOREIGN BONDS.—SPECIAL BUSINESS.**—Fortnightly Accounts opened on receipt of the usual cover.

JAMES H. CROFTS, 1, FINCH LANE, LONDON.

**AMERICAN AND CANADIAN STOCKS AND SHARES.—SPECIAL BUSINESS.**—Fortnightly Accounts opened on receipt of the usual cover.

JAMES H. CROFTS, 1, FINCH LANE, LONDON.

**OPTIONS in all STOCKS and SHARES dealt in.**—JAMES H. CROFTS, 1, FINCH LANE, LONDON.

**GOLD AND SILVER MINES.—SPECIAL BUSINESS in ALL** marketable INDIAN GOLD SHARES, and in Colombian Hydraulic, California, Callao "Bis," El Callao, Gold Coast, Guinea Gold Coast, Kongsberg, New Callao, Oscar, West Callao, Tollma A., Tollma B, La Plata, Rio Tinto, Frontino and Bolivia, Potosi, Oltis, Nouveau Monde, Ruby, Richmond, Victoria.

\* \* \* SHARES in the ABOVE SOLD FOR FORWARD DELIVERY ONE, TWO, OR THREE MONTHS ON DEPOSIT OF TWENTY PER CENT.

JAMES H. CROFTS, 1, FINCH LANE, LONDON.

**MISCELLANEOUS SHARES of ALL DESCRIPTIONS BOUGHT or SOLD.—SPECIAL BUSINESS.**—Brighton Aquarium, General Credit, Hudson's Bay, Native Guano, Suez Canal, Westminster Aquarium, and Hotel Suez.

SHARES SOLD FOR FORWARD DELIVERY, ONE, TWO, OR THREE MONTHS, ON DEPOSIT OF TWENTY PER CENT.

JAMES H. CROFTS, 1, FINCH LANE, LONDON.

**BALKIS SHARES.—SPECIAL BUSINESS at CLOSE MARKET PRICES** either for CASH or FORWARD DELIVERY one two or three months.

JAMES H. CROFTS, 1, FINCH LANE, LONDON.

**TRANSVAAL GOLD AND SOUTH AFRICAN DIAMOND FIELDS.** SPECIAL BUSINESS in all Transvaal Shares, including LISBON-BERLYN, TRANSVAAL, SPITZ KOP, SCHWAB'S GULLY, KIMBERLEY NORTH BLOCK, and KIMBERLEY CENTRAL.

\* \* \* SHARES in the ABOVE SOLD FOR FORWARD DELIVERY ON DEPOSIT OF TWENTY PER CENT.

JAMES H. CROFTS, 1, FINCH LANE, LONDON.

**ESTABLISHED 1842.**

**MESSRS. H. HALFORD AND CO.,** STOCK AND SHARE BROKERS, 2, ROYAL EXCHANGE AVENUE, E.C.

Have BUSINESS in ECTON COMPANY SHARES.

SELLERS are requested to communicate with the above.

**T. LETCHER, JUN., MINE SHAREBROKER, REDRUTH,** TRANSACTS BUSINESS at close prices in all CORNISH MINES.

\* \* \* Advice and information to intending investors.

**JOHN RISLEY, STOCK AND SHARE BROKER,** AND MINING SHARE DEALER, 38, CORNHILL, LONDON, E.C.

ESTABLISHED 1860.

BANKERS: LONDON AND WESTMINSTER, Lothbury, E.C.

**MR. W. TREGELLAS, 40, BISHOPSGATE STREET** WITHIN, E.C.

Deals in all descriptions of STOCKS and SHARES at close market prices.

**MESSRS. ENDEAN AND CO., STOCK AND SHARE DEALERS,** 85, GRACECHURCH STREET, LONDON, E.C.

ESTABLISHED 1862.

BANKERS: LONDON AND WESTMINSTER, Lothbury, E.C.

**HORACE J. TAYLOR,** 38, GREAT ST. HELEN'S, LONDON, E.C.

STOCK, MINING, and MISCELLANEOUS SHARE DEALER.

ESTABLISHED 1874.

BANKERS: CENTRAL BANK OF LONDON (Limited).

**BRITISH AND FOREIGN MINING OFFICES.**

Messrs. PETER WATSON AND CO., 18, AUSTIN PRIARS, OLD BROAD STREET, LONDON, E.C.

BANKERS: THE ALLIANCE BANK (Limited).

**MESSRS. PETER WATSON AND CO.'S** BRITISH AND FOREIGN MONTHLY MINING NEWS—STOCK AND SHARE INVESTMENT NOTES—MINES, MINERALS, AND METAL MARKETS—SHARE LIST, No. 885, VOL. XVII., for OCTOBER month, will shortly be ready, and will be sent to customers on application.

Annual Subscription..... 5s. | Single Copy..... 6d.

**MR. ALFRED E. COOKE,** BRITISH AND FOREIGN STOCK AND SHARE DEALER, 9, OLD BROAD STREET, LONDON.

ESTABLISHED 1853.

(Opposite the Stock Exchange, with which his offices are in DIRECT TELEGRAPHIC COMMUNICATION.)

Mr. ALFRED E. COOKE can SELL the following shares, or any smaller marketable number at prices affixed FREE OF COMMISSION:—

30 Almaden, 4s.	30 Hoover Hill, 5s.	50 Potosi, 6s.
200 Balkis, 3s. 9d.	50 Home Mines Trust, 2s.	50 Prince of Wales, 6s. 6d.
20 Bratsberg, 2s. 6d.	50 La Plata (New), 5s. 3d.	5 Schwab's Gully, 2s. 6s. 3d.
50 Callao Bie, 9s.	20 Leadhills, 21s. 6s. 3d.	20 South Caradon, 13s. 6
40 Chile Gold, 2s. 3d.	30 Lisbon-Berlyn, 6s.	80 South Kitty, 10s.
35 Colombian Hyd., 9s. 6d.	50 Mounts Bay, 2s. 3d.	10 Tollma A., 2s. 6
50 Chontales, 4s.	20 Mysore Gold, 12s. 3d.	20 Transvaal Gold, 19s. 6
50 Cor. South Australian Copper, 1s. 3d.	50 New Caradon, 1s. 9d.	40 Trevaunance, 37s.
100 Denver, 2s.	50 New Callao, 3s.	10 U. Mexican, 2s. 13s. 6
30 Devala Moyer, 3s. 9d.	15 New Kitty, 32s. 6d.	55 Victoria Gold, 7s.
50 Devon Con., 2s. 17s. 6	40 New W. Caradon, 4s.	5 Wheal Agar, 21s. 6
100 Devon Friend., 2s. 6d.	50 Old Shepherds, 13s. 6	5 Wheal Basset, 2s. 6
100 Dolcoath, 2s.	15 Organo, 10s. 6d.	100 West Caradon, 1s. 9d.
100 Don Pedro, 6s.	20 Orlita, 22s.	40 West Crebor, 1s. 6d.
100 Drakewalls, 2s. 6d.	45 Oscar, fully paid.	20 Wheal Crebor, 22s. 6d.
100 Duchy Fer., 17s.		
100 East Blue Hills, 5s.		
100 Eberhard, 6s.		
100 East Caradon, 4s.		
100 East Lovell, 5s.		
100 East Wh. Rose, 3s. 3d.		
100 Ecton, 20s.		
100 El Callao, 2s. 12s. 6		
100 Frongoch, 17s.		
100 Frontino, 13s. 9d.		
100 Goginan, 1s. 9d.		
100 Gold Coast, 3s.		
100 Glenrock, 2s. 3d.		

MANY OF THE ABOVE SHARES WILL BE SOLD FOR FORWARD DELIVERY (ONE, TWO, OR THREE MONTHS) ON DEPOSIT OF TEN OR TWENTY PER CENT.

THE FOLLOWING SHARES SHOULD BE BOUGHT:—

Prince of Wales, Schwab's Gully, Balkis, Old Shepherds, New West Caradon, South Kitty, Polberro.

Mr. COOKE has correspondents in every important city and town in England, whereby he can deal in Local Shares of every description.

Daily and Weekly Lists of Prices issued to clients on application.

ADVANCES MADE ON STOCKS AND SHARES.

Letters and Telegrams receive immediate personal attention.

BANKERS: ROYAL EXCHANGE (Limited), Cornhill, London.

**MR. JAMES STOCKER, STOCKBROKER,** 2, CROWN COURT, THREADNEEDLE STREET, LONDON, E.C.

A ready Market for Buyers or Sellers of Shares in British Mines; also Foreign Gold and Silver; and Miscellaneous Stocks and Shares, British and Foreign Funds, Railway Stocks, &c., for cash or account.

BANKERS: LONDON AND WESTMINSTER, Lothbury, E.C.

ESTABLISHED 35 YEARS.

**JOHN B. REYNOLDS, STOCK AND SHARE DEALER,** 37, WALBROOK, LONDON, E.C.

Established Twenty-five Years.

BANKERS: LONDON JOINT-STOCK.

**WEST KITTY, TREVAUNANCE, NEW KITTY, WEST POLBERRO, AND POLBERRO.**

For prospect of trade, tin markets, management of mines, rich districts, &c., see verbatim reports of meetings of these companies, recently held, supplied gratis on application to Mr. Reynolds.

300 per cent. per annum on capital as the result of investments recommended by Mr. Reynolds, and other particulars. See Mr. Reynolds's "Facts and Figures," also supplied gratis on application to him.

The present is a very opportune moment for the investment of money in securities of all descriptions.

Mr. Reynolds is a buyer of any part of 1000 Polberro shares at 25s each, and is a seller of a limited number to any of his customers at 42s. 6d. each. Dealers are offering 2s. per share for the option of buying Polberros in two years hence at 47 10s. each.

Mr. Reynolds is also a buyer of any part of 500 Trevaunance shares at 39s. Correspondents will kindly state names and lowest price for cash.

Mr. Reynolds transacts business with promptitude at net prices for cash only at 27 10s. each.

**POLBERRO, ST. AGNES.**

The shares of this mine are in favour, and will advance probably to a very high figure. The mine has been inspected by gentlemen who are well known, and whose opinions are universally respected. Mr. REYNOLDS will be happy to furnish the particulars of their report, and to give to his correspondents any information in his power. The books of the company and all other particulars are open for inspection at the company's offices. The management is the same as that of West Kitty, and the property promises to be of a very high order. Mr. REYNOLDS directs attention to the fact that those who have purchased the shares can already obtain a fair profit. Mr. REYNOLDS further directs attention to the fact of his having been the first to introduce West Kitty, under very similar circumstances to those which now characterise Polberro, St. Agnes, and Mr. REYNOLDS with equal confidence recommends the latter company's shares.

West Kitty, with at present 12s. per share paid, returns 30s. per share per annum as a minimum dividend with every prospect of further increase. When West Kitty shares had only 2s. per share paid they were at a premium of 22 each.

**WEST POLBERRO.**—Mr. REYNOLDS is a buyer of any part of 1000 shares at 11s. per share.

Mr. REYNOLDS refers to his remarks on page 1147.

**PROFITABLE INVESTMENTS.**

To no class of joint-stock business does the Trust principle seem more applicable than to mining; for the essence of this principle is that risks shall be divided, and so minimised as much as possible. It is, therefore, matter for surprise that so few attempts have been made to apply it to mines. One of the few instances in which the plan has been carried out is

**THE HOME MINES TRUST (LIMITED).**

This flourishing company continues to enjoy increased prosperity, and maintains its position as a sound 10 per cent. dividend-paying investment.

Every improvement in trade and in the price of metals reacts on the securities of the trust, and we venture to predict that from the bountiful harvest of all descriptions all over the world, an impetus will be given to trade which will carry metals and mining securities very much higher. This being conceded, there is not the slightest doubt that the trust will occupy an enviable position, and be able to place itself in the foremost rank of such institutions.

"During the very dull period through which the commercial world has been passing this trust has maintained an average dividend of 15 per cent. for the past three years, and this being so, it can readily be understood what it will be able to accomplish when business is prosperous."

"When it is thoroughly understood that this trust is not engaged in mining on its own account, but simply takes note and advantage of the fluctuations in the market for home mining shares, and advances cash to enable holders and others to do likewise, investors will soon realise the fact that from the profits obtainable on their numerous transactions, which are spread over a wide area, the Trust can readily earn 15 to 20 per cent. per annum, and this has been its average rate since its formation. Although only 10 per cent. is distributed, as much, or nearly so, is added to the reserve fund, and a continuance of the substantial return of 10 per cent., whatever the condition of business may be, is thereby assured."

"The shares are of 21 each, fully-paid, and carry the quarterly dividend of 10 per cent., payable this month."

"Dividends are payable quarterly."

"The shares are in active request, and advancing daily."

Investors should read our September Circular, now ready, post free.

**ABBOTT, PAGE, AND CO.,** STOCKBROKERS, 42, FOULTRY, LONDON, E.C.

**MR. WILLIAM H. BUMPUS, STOCK BROKER** AND MINING SHARE DEALER, 44, THREADNEEDLE STREET, LONDON, E.C.

[Established at this Address in 1867.]

BUSINESS transacted in ALL STOCK EXCHANGE SECURITIES, MINING and MISCELLANEOUS SHARES of every description.

An INVESTMENT LIST free on application.

**SPECIAL BUSINESS in the undermentioned:—**

100 Almaden, 4s.	50 Frontino, 15s.	100 Old Shepherds.
5 Akankoo, 8s. 6d.	10 Great Laxey, 9s.	50 Organo, 11s.
30 Birdsseye Creek, 11s. 6d.	150 Glenrock, 2s. 6d.	20 Panuclillo, 2s. 11s.
40 Bratsberg, 2s. 6d.	100 Home Mines Trust, 2s.	40 Polberro.
100 Balkis, 3s. 9d.	50 Hoover Hill, 5s. 6d.	60 Prince of Wales, 6s. 6d.
150 Chontales, 4s.	100 Ind. Consolidated, 2s. 6	100 Potosi, 6s. 3d.
25 Colorado, 4s. 6d.	30 Kilifresh, 5s.	15 Richmond, 2s. 12s. 3d.
100 California, 12s.	100 Kapsaga, 3s.	50 Ruby, New, 8s. 9d.
50 Colombian, 9s. 9d.	74 Lisbon-Berlyn, 5s. 6d.	10 South Condurow.
100 Chile Gold, 2s. 3d.	25 Leadhills, 21s. 6s. 3d.	50 South Caradon, 13s. 6
100 Callao Bie, 9s.	100 La Plata, 5s. 9d.	25 Trevaunance, 22s. 6
60 Carn Camborne.	100 Mysore Gold, 12s. 3d.	100 Transvaal, 19s. 6d.
3 Dolcoath, 2s.	70 Montana, 32s. 9d.	25 U. Mexican, 2s. 13s. 6d.
70 Devon Friend., 3s. 9d.	50 Marke Valley, 12s.	150 Victoria Gold, 7s.
15 Devon Consols, 2s.	100 Nouveau Monde, 1s. 9d.	60 West Godolphin, 22s. 6
100 East Wheel Rose, 9s. 6d.	40 New Kitty, 32s. 6d.	10 Wheal Grenville, 2s. 6
75 Eberhard, 6s.	60 New Emma, 11s.	30 Woolwich Tram.
50 East Blue Hills, 5s. 3d.	50 Oscar Gold, 19s. 6d.	

Where prices are not inserted offers may be made.

FOR SALE, 50 Shares (or part) in DE BEER'S DIAMOND MINING COMPANY at 25 10s. each. These shares are £10, fully paid, and return monthly dividends of 1 per cent.

\* \* \* The present is a most favourable opportunity for investing in SOUND MINING SECURITIES, a judicious purchase of which at the low prices now ruling will, in all probability, result in large profits within the next few months.

Mr. BUMPUS devotes SPECIAL ATTENTION to LEGITIMATE MINES, and is in a position to afford reliable information and advice to intending investors and others in the selection of Shares either for INVESTMENT or SPECULATION. Correspondence invited.

ESTABLISHED 1867.

**MR. CHARLES THOMAS,** MINING AGENT AND ENGINEER, 3, GREAT ST. HELEN'S, LONDON, E.C.

**MR. ALFRED THOMAS,** MINING ENGINEER, AND STOCK AND SHARE DEALER, 10, COLEMAN STREET, LONDON, E.C.

ESTABLISHED 1852.

**MR. HENRY J. TALENTIRE,** STOCK BROKER AND MINING SHARE DEALER.

SPECIAL BUSINESS in all Home and Foreign Mines at close prices.

OCTOBER CIRCULAR on application, containing valuable information and advice to investors, post free.

SHARES SOLD for forward delivery in one to three months upon usual deposit.

OFFICES:—21, THREADNEEDLE STREET, LONDON, E.C.

BANKERS: CITY BANK, Threadneedle-street, E.C.

**MR. J. GRANT MACLEAN,** SHAREBROKER AND IRONBROKER, STIRLING, N.B.

Refers to his Share Market Report on page 1150 of to-day's Journal.

**STOCKS AND SHARES.**

**JOHN LENN AND CO.'S CIRCULAR, POST FREE,** contains Highest, Lowest, Latest Prices of all Stocks and Shares, also shows the return per cent. at a glance.

**JOHN LENN AND CO.'S CIRCULAR, POST FREE.** The advice given in their former Circulars has enabled investors to make from 50 to 150 per cent. in a week.

**JOHN LENN AND CO.'S CIRCULAR, POST FREE,** contains special information respecting the safest investments obtainable, paying from 5 to 12½ per cent.

**JOHN LENN AND CO. (LIMITED), STOCK AND SHARE DEALERS, 4 AND 5, GROCERS' HALL COURT, LONDON, E.C.**

ESTABLISHED 1868.—THIRTEEN YEARS IN CORNWALL.

**SAMUEL JAMES, STOCK BROKER AND MINING SHARE DEALER,** 14, ANGEL COURT, LONDON, E.C.

Member of the Redruth Mining Exchange.

Those who wish to buy or sell any mining shares should consult Mr. JAMES. Mr. J. devotes his entire attention to home and foreign mines, and places his special information at the disposal of his clients. That mining offers undoubted advantages for quick returns no one can deny. Look at the enormous sums of money paid in dividends by home and foreign mines. A large number of wealthy families owe their present proud positions to adventuring in LEGITIMATE MINES. With a better price for metals many of the smaller priced shares would immediately advance some hundreds per cent.

TREVAUNANCE also POLBERRO SHARES SHOULD BE BOUGHT AT ONCE.

There are many mines worth attention, as proceedings of recent shareholders' meetings prove beyond doubt. During the last 40 years there has no such opportunity presented itself as the present for investment in British mines. Metals are certain to advance. In well-informed circles no doubt is entertained on this point. Buyers must not further delay orders.



## DEFUNCT AND DYING PUBLIC COMPANIES.

FROM THE LONDON GAZETTE, SEPT. 30.

The Registrar of Joint-Stock Companies has given notice, pursuant to s. 7 (4) of 43 Vict., ch. 19 (Companies Act, 1880), that the names of the undermentioned companies have been this day (Sept. 30) struck off the register, and that such companies are hereby dissolved:—

\* (NOTE.—An asterisk prefixed to a name signifies that another company with the same or similar title is believed to be carrying on business at the present time.)

Aberdare Temperance Hall, Accident Indemnity, Ajax (Big Indian) Silver Mining, Algoma Silver Mining, Alliance Co-operative, Alt-y-Crib Silver-Lead Mining, Alsace-Lorraine Provision, Alta-California Water Supply, and Excelsior Gold Mining, American Joint National Bank, Anglo-American Maresio Marble, Anglo-Belgian Glass, Anglo-Belgian Maresio Marble, Anglo-French Tramways, Anglo-German Express, Anglo-German Mining, Fuel, Fire-Clay, Anglo-Maltese Steam Tug and Ferry, Anglo-Russian Public Works, Anglo-Spanish Bank, Anglo-Spanish Telegraph, Argentine Tramways, Army, Navy, and General Outfitting, Arthur Green and Company, Arthur Speight and Sons, Auvergne Bituminous Rock and Paving.

Bagillt Chemical, Bahia Docks, Ballot Investment, Ballycumisk Copper Mining, Bangor and Pantdrainiog Slate, Banking, Contract, and General Agency, Barnsley Times, Barrow and Northern Counties Pure Linseed Cake, "Bay of Aboukir" Steamship, Bayswater and Paddington Co-operative Association, Bayswater Livery, Beaver Silver Mining, Bebro's Patent Printing and Ticket Registering, Beechlands Coffee Estates, Beet-Root Sugar, Belgian Glove, Belgrave Stables, Bellavista Silver Mining, Benheim Bituminous Asphalte, Berwick-upon-Tweed Public Building, Bettwe-y-Coed Slab and Slate Quarry, Birmingham and Midland Consumers' Co-operative Association, Bishop Horse-Shoe, Boiler Cleansing, Bolivian Trading, Border Counties Scotch Tweed Mill, Boscombe Spa Hotel, Boston and Preston Tramway, Boston Guardian, Boulogne-sur-Mer New Town and Harbour Construction, Bradford Asphalte Water, Brazilian Sugar Factories, Brazilian Sugar Refinery, Brighton and Sussex Consumers' Co-operative, Britannia Indiarubber and Kamptulicon, British and Colonial Publishing Company, British and Colorado Smelting Works, British and Foreign Brewing and Distilling, British and Foreign Water and Gas Works, British and Foreign Waterproofing Leather, British and United States, International Association, British Barytes, British Commercial Insurance, British Hay Press, British Indian and Colonial Agency and Co-operative Society, British Patent Condensed Milk, British Patent Tanning, British Supply Service, British Workman Fire Insurance, Brittany Mines, Broadway Colliery, Buckley Gas, Coke, and Water, Buenos Ayres and River Parana Railway, Burston Patent Centre Cycle, Burton-upon-Trent Loan and Investment.

Calico Printing Engraving, California Mining, California Prospecting, Camberwell Advance, Discount, and Investment, Camberwell and Peckham Working Men's Club House, Canadian, Canadian Oil Works, Cardiganshire Old Bog Mine, Carmarthen Silver-Lead Mining, Carrara Railway, Carriage Insurance, Castle Dykes Iron, Castleford and Whitwood Gas Light and Coke, Castleton Conservative Club Buildings, Catty Crook, Cavendish Steamship, Cefn Hafod and South Dyliffe Silver-Lead Mining, Cefn-y-Guntla Mine, Celyn Bog Silver-

Lead Mining, Central City Mining, Chans Silver-Lead Mining, Charing Cross Hotel, Chartley and Fradley Mining and Manufacturing, Chesterton, Church Bank Mill Cotton Spinning, City Residences, Civil Service Coal Supply, Clare and Son, Clench, Baring, Clive, and Co., Cleveland Public Hall, Clifton Silver Mining, Coal Dust Compressing Patent Machine and Fuel, Coate Moor Ironworks, Colchester Coal, Colonial and Foreign Meat Supply, Colonial Phosphate, Colorado, California, Gold and Silver Mining, Colorado Highland Mining, Colorado United Gold and Silver Mining, Colwyn Hematite Iron Ore, Commercial Carrying, \*Consolidated General Mining, Continental Wine Growers, Co-operative Wine, Copenman's Patent Seat Raft and Marine Life Saving, Cornwall, Devonshire, and Kentish Oyster Fishery, Credit Society of France and England, Crescent and Nyanza Silver Mines, Cricklewood and Kilburn Gas, Crown Slate, Crown Soap and Colour, Cwm Lery Lead Mines, Cwm Nant Ddu Lead Mining.

Dagenham Brick, Datchett Gas Light, Coke, and Coal, Davenport Mining, Day's Patent Improved Pavement, De Broke Mining, Deptford Baths and Washhouse, Devil's Bridge Mining, Devon Slate Quarries, Di Castro Bitumen and Asphalte, Dimboola Coffee, Dipton and Newcastle Omnibus, Direct American Telegraph, Direct Atlantic Telegraph, Dolwen Consolidated, Dover Newspaper, Dovey Slate Quarry, Dugony Fishery and Meat Preserving.

East Coast Iron, East Cornwall Fire-clay and Brick, East Dolwen, East Indian and Colonial Co-operative, East Indian, Civil, Military, and Commercial Agency, East Llwyn Teify Mining, East Nant-y-Mwyn Lead, East Sheboygan Silver Mining, Echo Americano, Economic Supply Association, Economic Telegram, Eldorado Iron Syndicate, Electric and General Engineering, Eltham Hall, Enfield Manufacturing, English and Foreign Marine Salvage, English Double Chronograph, English Foreign, and Colonial Mines, \*Equitable Accident Assurance, Erglodd and Penpompren Silver-Lead Mining, Espinosa Silver Mining, Etna Fire Light, Evischacrow Hematite Ore, Excelsior Co-operative Ironworks, Excelsior Hydraulic Gold Washing.

Ferguson Gold Mining, Finland Charcoal Ironworks, Flintshire Hematite, \*Food Preserving, Foreign Government Securities Bank, Forest of Dean Iron Ore, Franco-Canadian Steamship, Free Trade Fire Office, Free Trade Tea, Fresh Provisions Co-operative, Fur Company.

G. D. Davis and Company, Galchog Colliery, Gas and Water Works Construction and Maintenance, Gas Generator, Gas, Water, and Sanitary Works Construction, General Asphalte, General Bangor and Llanberis Slate, General Building Material, General Co-operative Colliery, General Household's Discounts, General Mortgage and Securities Insurance, General Traction Engine, General Tramways, General Trust Fund, Glamorganshire Mining, \*Globe Telegraph, Good Intent Teetotal Hall, Good Templar Printing and Publishing, Gorton Omnibus, Granulite Glassworks, Great Cumberland Hematite Iron Ore, Great Grimsby White Star Sea Fishing, \*Grimsby Newspaper and Printing Association, Grimsbury Bridge Paper, Grimwith Lead Mining, Guernsey Railway, Gwestyn Consols.

Hadham Public Hall, Hafodan Mining, Hall and Company, Hamilton Smelting, Hanover and Brunswick Rock Asphalte, Harlech Silver-Lead, Copper, Zinc, and Sulphur Mining, Hastings and Eastbourne Consumers' Co-operative, Hatcher Clifford and Co., Hellin Sulphur, Henning Limmer Asphalte, Heraclea, Highton Batteries,

Hilltown and Wexford, Himalayah Mining, Hinckley Gas Light and Coke, Hodyoad Iron Mining, Hogsthorpe Gas, Holt and Farnham Gas, Holway Silver-Lead Mining, Hongkong and Shanghai Tea, Hornchurch Brewery, House Repairs Insurance, Huanco Marne, Humber Ice, Hungarian Chrome, Coal, and Iron, Hyeshope Silver-Lead and Barytes Mining.

Ilfracombe Co-operative Coal, Ilkley Town Hall, Illinois Gold and Silver Mining, Imperial Chemical, Inchbrook Chemical Works, Independence Gold Mining, India and China Tea, Indigo of London, Cocanada, and Madras, Inodoros Quick Drying Paint, Investors Protection, \*Irish Tramways, Islay Lead Mining, Italian Patent Spontaneous Divisor Closet and Manure.

Jamaica Paper Pulp, John Cross and Co., \*John Lomas and Co., Kendal Woollen Mills, Kent Chalk Quarries and Cement and Brick, Kent's Bank Hotel, Keswick United Silver-Lead Mines, Kingwood Coal and Iron, Knife and Fork Newspaper, Knysna.

Lahore Ice and Aerated Water, Lamplugh Hematite Iron Mining, Lancashire and Cheshire Land, Lancashire Brewery, Leeds and Wakefield Co-operative, Leeds Printing and Publishing, Leeds White Horse Hotel, Leicestershire Ironstone and Smelting, Leyton Park and Glass, East London Cemetery, Licensed Victuallers' and Hotel Keepers' Glass and China Supply, Licensed Victuallers' Brewery, Licensed Victuallers' Colliery, Licensed Victuallers' Tobacco, Liège Tramway, Limited Partnership, Liverpool Advertising and Commission, Liverpool and District Funeral and General Undertaking, Liverpool Exchange Club, Liverpool Shipowners, Llanelly Anthracite Coal, Llanybynech Gas, Lloyds Carriage and Wagon Works, Llwyn Pandy Lead Mining, Llywernog, London Advance and Agency, London and Australian Steam Navigation, London and General Safe Deposit and Loan, London and Paris Steamboat, London and Provincial British Asphalte, London and St. Arnaud Gold and Silver Mines, London and Suburban Newspaper, London and Teral Tea, London and Thames River (N.Z.), Golden Crown, London Co-operative Coal, London Credit, London Gun, London Pantechnicon, London Syndicate of New Guinea, Lyjue Regis Blue Lias, Lime. (To be continued.)

**MINING IN TONQUIN.**—Tonquin possesses, says the Revue Industrielle, mines of gold, silver, mercury, antimony, tin, zinc, and copper, the latter being numerous, and when the terms of concession are settled there will be a great outlet for emigration. Iron is common, and the province of Thain-Guyen has important veins of lead. Arsenic, saltpetre, alum, a succedaneum of petroleum, and kaolin are also met with. Coal is very abundant in Tonquin, as appears from a work of Mr. Fuchs, engineer of mines, who was employed in 1881 by the Department of Marine to explore the coal beds known or suspected in Tonquin, and in certain parts of Annam.

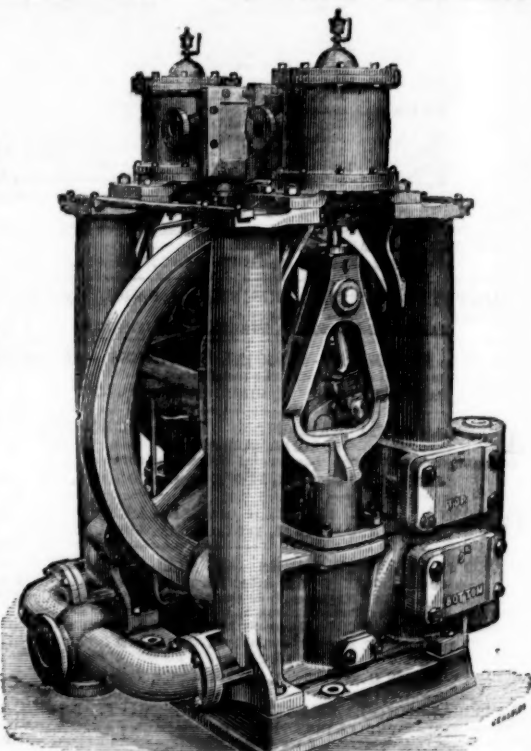
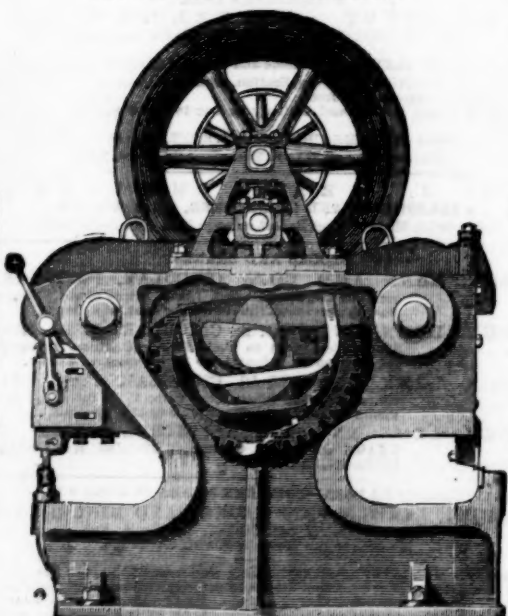
**RAILWAYS IN JAPAN.**—In 1872 the first railway in Japan was opened; it was constructed by English engineers at a cost of 600,000, and ran between Hiogo and Osaka, a distance of 20 miles. Since that time this railway has been lengthened at both ends, and two other distinct lines constructed, and at the present time there is a total length of 240 miles open. Two other lines are in course of construction, while five others are about to be commenced. Altogether railway enterprise is in a very active state in Japan.

## JOHN CAMERON'S

FLY-WHEELS ON BOTH SIDES.

SPECIALITIES ARE HIS  
STEAM PUMPS  
FOR  
COLLIERY PURPOSES.Specially adapted for forcing Water any height  
ALSO, FORSINKING, FEEDING BOILERS AND STEAM  
FIRE ENGINES,

Of which he has made over 9000.

ALSO, HIS  
PATENT CAM AND LEVER  
PUNCHING & SHEARING MACHINES.Works: Oldfield Road, Salford,  
Manchester.AGENTS { For LONDON and DISTRICT—PRICE and BELSHAM,  
52, QUEEN VICTORIA STREET, E.C.  
For NEWCASTLE and EAST COAST—E. BECKWITH and CO.,  
BONNERSFIELD, SUNDERLAND.

By a special method of preparation this leather is made solid, perfectly close in texture, and impermeable to water; it has, therefore, all the qualifications essential for pump buckets, and is the most durable material of which they can be made. It may be had of all dealers in leather, and of—

HEPBURN AND GALE, LIMITED,

TANNERS AND CURRIERS,  
LEATHER MILL BAND AND HOSE PIPE MANUFACTURERS,  
LONG LANE, SOUTHWARK, LONDON.  
Prize Medals, 1861, 1865, 1878, for  
MILL BANDS, HOSE, AND LEATHER FOR MACHINERY PURPOSES.

## PERFORATED SHEET METALS

FOR  
TIN, LEAD AND COPPER MINES,

MILLERS, BREWERS, AND

MALSTERS,

COLLIERIES AND

QUARRIES,

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AND

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MANCHESTER.

ESTABLISHED 1825.

## EDWIN LEWIS AND SONS,

Patent Tube Works, MONMORE GREEN and Britannia Boiler Tube Works, ETTINGSHALL,

## WOLVERHAMPTON.

MANUFACTURERS OF

Lapwelded &amp; Buttwelded Wrought-iron, Steel, or Homogeneous Tubes

FOR EVERY

## COLLIERY OR MINING PURPOSE.

## J. WOOD ASTON AND CO., STOURBRIDGE

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## CRANE, INCLINE, AND PIT CHAINS,

Also CHAIN CABLES, ANCHORS, and RIGGING CHAINS, IRON and STEEL SHOVELS, SPADES, FORKS, ANVILS, VICES, SCYTHES, HAY and CHAFF KNIVES, PICKS, HAMMERS, NAILS, RAILWAY and MINING TOOLS, FRYING PANS, BOWLS, LADLES, &amp;c., &amp;c.

Crab Winches, Pulley and Snatch Blocks, Screw and Lifting Jacks, Ship Knees, Forgings, and Use Iron of all descriptions

## WELDED STEEL CHAINS {

FOR CRANES, INCLINES, MINES, &c.,  
MADE ALL SIZES.



## Registration of New Companies.

The following joint-stock companies have been duly registered:—

**THE NORTH QUEENSLAND SUGAR ESTATES COMPANY (Limited).**—Capital 150,000*l.*, in shares of 10*l.* To purchase certain freehold estates, and to carry on the business of sugar manufacturers, &c. The subscribers (who take one share each) are—W. Gardiner, Marham; R. N. Clarke, Reading; E. J. S. Jesse, Reading; E. S. Dawson, Queensland; R. W. Stuart, Brisbane; A. W. Gay, 88, Bishopsgate-street Within; W. T. Aniston, Arbroath.

**THE LONDON GENERAL PAVING COMPANY (Limited).**—Capital 100,000*l.*, in shares of 10*l.* To carry on the business in all branches of an asphalt and paving company. The subscribers are—W. Stanfield, 6, Beresford-road, 40; H. F. Giles, Surbiton, 40; W. E. Wallis, Westminster, 40; R. J. Jenkins, 16, King William-street, 20; H. Alcock, 123, Bishopsgate-street, 20; N. D. Garrett, 14, St. James's-square, 40; J. Magerson, Chesterfield, 40.

**THE HOUSE AND GENERAL ELECTRIC LIGHTING COMPANY (Limited).**—Capital 75,000*l.*, in shares of 1*l.* The business of electric machine makers, electro-platers, &c., in connection with certain acquired patents. The subscribers (who take one share each) are—A. Beckwith, 10, Noble-street; H. M. Guillemard, Upper Clapton; R. R. Kelly, 1, Queen Victoria-street; H. H. Kerr, 13, Fenchurch-lane; T. E. Youle, East Dulwich; E. Schubert, 32, St. Swithin's-lane; H. Bennett, Gresham House.

**THOMAS EVANS AND CO. (Limited).**—Capital 20,000*l.*, in shares of 1*l.* The business of merchants, fellmongers, &c. The subscribers (who take one share each) are—A. Booth, Liverpool; E. Morin, 14, Sherborne-lane; C. W. Ward, Bermondsey; G. Ashdown, Lower Norwood; T. Tate, Tawnton; J. L. Cogan, 14, Sherborne-lane; F. F. Robinson, 40, Stanley-road.

**THE NOTTINGHAM AND BULWELL AND DISTRICT OMNIBUS AND CARRIAGE COMPANY (Limited).**—Capital 30,000*l.*, in shares of 1*l.* The business of omnibuses and carriage proprietors, livery stable keepers, &c. The subscribers are—J. G. Clarke, Nottingham, 5; W. Jordans, Bulwell, 5; W. Howe, Bulwell, 3; R. Hind, Bulwell, 3; C. Greenwell; Nottingham, 5; T. Shepherd, Nottingham, 3; T. Sellars, Nottingham, 5; J. Armitage, Nottingham, 3.

**JOSHUA COOK AND SONS (Limited).**—Capital 60,000*l.*, in shares of 10*l.* To acquire and continue at Bolton the business of cotton spinners, doublers, &c. The subscribers (who take one share each) are—J. Crook, Bolton; G. H. Crook, Bolton; J. S. Crook, Bolton; A. T. Crook, Bolton; R. Heywood, Salford; H. T. Crook, Manchester; F. H. Crook, Eccles; W. H. Higgins, Bolton.

**THE LUHRIG COAL AND ORE WASHING MACHINE COMPANY (Limited).**—Capital 2000*l.*, in shares of 10*l.* The business of machine and apparatus manufacturers in all branches in connection with certain patents. The subscribers are—K. Lührig, Dresden, 100; S. Owen, 19, Great George-street, 31; R. de Soldenhoff, Merthyr Tydfil, 32; K. Bulowins, Dresden, 1; A. de Roy, Brussels, 33; T. Slater, 19, Great George-street, 1; W. Holmes, 20, Threadneedle-street, 1; G. Turner, 181, Choumert-road, 1.

**W. T. SHEPHERD AND COMPANY (Limited).**—Capital 35,000*l.*, in shares of 1*l.* To acquire and continue the general business of printers, stationers, lithographers, &c. The subscribers (who take one share each) are—T. Shepherd, South Hackney; W. R. Skinner, 15, Isledon-road; J. H. Winby, Dalston; A. Standing, Charlton; R. B. Tennant, Lee; H. M. Goodman, Rochdale; J. W. Marshall, 13, King William-street.

**THE HOLYWELL DISTRICT LEAD COMPANY (Limited).**—Capital 15,000*l.*, in shares of 1*l.* To acquire, by purchase or otherwise, a certain mineral property situated in the parish of Holywell, for the purpose of fully developing and working said property, and generally to carry on the business of miners, and that of smelters, spelters, &c., in all branches. The subscribers are—F. F. Gamble, East Acton, 25; J. Toms, Croydon, 5; W. Marlborough, 29, Bishopsgate; T. H. Baxter, 93, Grosvenor-road, 5; C. J. Brunn, 53, Crowndale-road, 5; W. C. Castle, 8, Chatterton-road, 5; A. W. Fox, 11, Haverstock-street, 3. The number of directors must not be less than two, or more than five. The qualification is fixed at 25 shares.

**J. ORMOD AND COMPANY (Limited).**—Capital 20,000*l.*, in shares of 500*l.* To acquire and carry on in all branches the business of paper printers and stationers, &c. The subscribers (who take one share each) are—J. Ormrod, Liverpool; W. Collinson, Liverpool; W. Budden, Liverpool; W. Sullivan, Bromley-by-Bow; T. Griffiths, Liverpool; H. Walters, Liverpool; R. T. Williams, 5, Rennie-street.

**THE ALLIANCE EXPLOSIVES COMPANY (Limited).**—Capital 10,000*l.*, in shares of 10*l.* To manufacture, buy, sell, and deal in dynamite and other explosives. The subscribers (who take one share each) are—F. Barbe, Paris; C. Cicile, Paris; H. P. Moorhouse, Paris; G. Vian, Paris; L. Ugues, Paris; L. Schnetz, Paris; A. Richard, Paris.

**THE BIRKENHEAD INSTITUTE (Limited).**—Capital 10,000*l.*, in shares of 5*l.* To found, establish, and maintain schools in and around said town. The subscribers (who take one share each) are—G. Atkin, Rockferry; T. W. Oakshott, Rockferry; C. Houston, Oxon; J. Sturgarones, Rockferry; W. F. Legg, Tranmore; J. T. Raken, Birkenhead; J. B. Moffatt, Rockferry.

From Mr. JOHN B. REYNOLDS:—The markets present many peculiar and interesting features. On all sides we hear complaints about the paucity of business, but the fact that transactions are few is easily accounted for. Unfortunately the absence of buyers of late has caused quotations to dwindle down to a misleading level, and now that buyers are coming forward they find that they can take no appreciable advantage of low prices. Thus some of the leading shares are rising without much apparent cause. It is one thing for parties to say that they will come in at reduced prices, but another thing to succeed in doing so; in short, the depression in the market prices of shares has evidently been more apparent than real. It is well for holders that they are so wide awake to their interests, and now that it is stated on very high authority that buyers are anxiously on the look out it is time to be ready for a general advance and great activity. As such is the actual position it is as well to recognise it, and not to endeavour to operate upon the minds of investors by statements which have no foundation in fact. It is, fortunately, a very difficult matter after all to frighten English investors by gloomy forebodings; this has been made clear of late much to the credit of the monetary classes. Two facts, however, must be admitted, and the first is that buyers have been scared away; and, secondly, that a few timid and needy sellers have succumbed to the pressure of a misleading level.

Now, however, speculators who have long been waiting for the lowest are many of them have already been disappointed, and more will be. Thus, parties have to give their brokers limits some 25 per cent. over and above quoted prices. We need hardly say that these remarks only apply to first-class speculative securities, the markets for which are comparatively limited. But it may be asked how does all this correspond with the depressed prices of metals? Here, again, we have to deal with a condition of things brought about by the absence of buyers and general stagnation. At any moment a great rebound in the price of tin may be looked for. Buyers are quite certain to come forward, because their wants must be supplied, and what then? Precisely what we have seen over and over again—a rush something akin to madness for all sorts of mining shares, bad and good alike.

The history of the past proves, we think, the correctness of these conclusions, and no one will be found to deny that those who have had the courage to buy quietly in depressed markets have been those who have done well. What has caused this general depression in trade; over-trading or over-speculation, or what? Probably neither the one nor the other. The depression has been the result of great prosperity. It has been the reaction—the natural reaction which always comes. At present the political world is being reassured. There is no desire for war anywhere; on the contrary, as the signs of war are not forthcoming, "quiet" is a necessity. The steady position of the Market for Foreign Bonds is significant. The turn for the better in the railway receipts should be noted. Casting aside political and all prejudice, what is there to cause distrust? For ourselves we know of nothing.

Then it is to us no matter for surprise that quiet, but persistent, buyers are appearing on all sides. The stocks and shares which find favour have been too well recorded in the papers during the week to need further notice here; but it must be admitted that the advance which has taken place in the prices of certain mining shares has been the result of a slight appreciation of prospect, which are unrivalled even in the extraordinary history of the mining industry of Great Britain.

**PIG-IRON.**—Messrs. WILLIAM CONNELL and Co. (Sept. 30) write:—There has been a considerable business done at improved prices. The opening quotation, 41*s.* 3*d.*, was the lowest accepted, and the highest, 42*s.* 0*d.*, was sold on the 19th, closing earlier at 41*s.* 7*d.* cash. The stock in store shows a decrease of 2295 tons, and now amounts to 583,597 tons, with warrants in circulation for 534,685 tons. The Middlesbrough market has been firmer; No. 3, f.a.b. tone, being now quoted at 36*s.* 6*d.* per ton. The stock in Connell and Co.'s yards there is 54,739 tons, being a decrease of 1245 tons, and there are warrants in circulation for 53,475 tons.

## Meetings of Public Companies.

## LEADHILLS SILVER-LEAD MINING AND SMELTING COMPANY.

The ordinary general meeting of shareholders was held at the offices of the company, Finsbury Circus, on Wednesday, Mr. PETER WATSON (Chairman and managing director) presiding. Mr. FELIX F. WILSON (secretary) read the notice convening the meeting, and the report of the directors and statement of accounts were taken as read.

The CHAIRMAN said: Gentlemen, as you will see by the statement of accounts we submit to you for the 12 months ending June 30 last the profit shown is probably as large as could be expected under the circumstances of the lead market. The profit and loss account may be briefly summarised thus:—Of the 4002*l.* 3*s.* 8*d.* brought forward at the beginning of the year 3500*l.* was applied to the payment of the dividend of 3*s.* 6*d.* per share on Oct. 11 last year, 453*l.* 15*s.* 8*d.* was written off the value of the "leads," and the unappropriated balance, 65*l.* 3*s.*, was carried forward. In the year under consideration the lead and one sold realised 19,738*l.* 4*s.* 7*d.*, and rents to the amount of 90*l.* 1*s.* 9*d.* were received, together 19,828*l.* 6*s.* 4*d.*, while the total disbursements amounted to 15,967*l.* 14*s.* 11*d.*. If these had been the only factors in the case a profit of 3861*l.* 11*s.* 5*d.* would have been made; but, unfortunately, the difference in the value of our stock of lead has reduced it by 2400*l.*—to 1467*l.* 11*s.* 5*d.*. The quantity of lead in stock on June 28 last was within 20 tons of what was held the previous year, so the difference in value is almost entirely attributable to the depreciated prices. With the 584*l.* brought forward there is an available balance of 1534*l.* 13*s.* 5*d.*, of which we propose to apply 1500*l.* to the payment of a dividend of 3*s.* 6*d.* per share; indeed, I may tell you that the directors have to-day passed a resolution that that dividend shall be made payable on and after October 16. The quantity of ore dressed during the 53 weeks included in the accounts was 2400 tons 12 cwt., of which 2142 tons 4 cwt. were smelted, producing 32,721 bars, and 100*l.* 10*s.* of ore were sold. The average value of pig-lead sold and credited as stock is 11*l.* 6*s.* 4*d.*, stock brought forward from last account having been valued at 12*l.* a ton. In accordance with the wish expressed by the shareholders at the last meeting, the directors again approached the Earl of Hopetoun on the subject of the dues; but they regret to report that his lordship does not admit that the circumstances call for the readjustment of the royalties, and has declined to make any reduction. Capt. Waters' report upon the mines, that will be submitted to the meeting presently, will explain the work of the past year and our prospects. Probably the most encouraging feature is the run of ore ground being opened up by Gripp's adit south, on Brown's vein, which is being followed in depth by the winze below the level. In January last it was found necessary to replace the engine at Reid's dressing-floors by a new one of greater power. One of Messrs. J. Fowler and Company's was selected, and has given every satisfaction. That gentlemen, is the pith of the report of the directors; and, inasmuch as those figures have not been made generally public other than by their issue to the shareholders, it is necessary that they should be embodied in our proceedings to-day, in order that the shareholders and the general public may know the state of our accounts. What I have said really explains the account; but I may tell you that, in valuing our ore and pig-lead, it has been taken on the basis of 10*l.* a ton for pig-lead, whereas last year it was taken at 12*l.*, which was the then market price. The price has gradually fallen during the 12 months to about 10*l.* per ton, but I am happy to tell you, however, that, since the accounts were made up, the price has somewhat improved, and to-day the quotation is 11*l.* a ton. We have indeed, sold some lead at that price.

Mr. DON: That was a rise, I suppose?—The CHAIRMAN: Yes; we have sold as low as 10*l.* a ton; so it is a rise, though it is a comparatively small one. I may say that we have written off 10 per cent. of the cost of additional machinery, &c., and the cost of the small-mill, amounting together to 394*l.*, otherwise we should have shown so much more to the credit of the profit and loss account. I do not think there is anything else I need say so far as the accounts are concerned. They give you a clear statement of the position of our affairs; and with regard to the property itself the report which Mr. Waters has prepared will give you all the information you require. We have again to lament the very serious fall which has taken place in the price of lead since our annual meeting last year; that is to say from 12*l.* to 10*l.* a ton for pig-lead, and this of course has greatly militated against the interests of the company, as you must be aware. If we had had the ordinary prices for mineral that we had when we started the company we should have done a very great deal better, as a matter of course; and still better should we have done if we had had the price for lead that was received for the lead sold from this property in 1883, when I find it recorded that in that year they sold lead at 32*l.* a ton, and realised 45,360*l.* All I have to say on that point is that if we had had that price we should have realised more than 45,360*l.* worth of lead last year, and that in all probability we should have given 30,000*l.* to the shareholders. The cost of the small-mill, and to somewhat more recent periods; for, for instance, we had had a price equal to what we had 10 or 11 years ago, we should have made 16*l.* 10*s.* instead of 6*l.* 10*s.* a ton for our ore, and we should have been able to return something like 20,000*l.* more profit to the shareholders. But as matters stand we show that we are only able to distribute 6*s.* 6*d.* per share. Some of the shareholders will say that that is a very small dividend; but you must bear in mind that our royalty is one-ninth. For the past two years, however, we shall have returned a share of the profits to each shareholder, and we are now putting up a wheel underground, which is costing us a considerable amount of money. All this is being done out of revenue—not out of capital—but for these things we should have shown you a very much better profit to-day. But these improvements are being carried out for the future welfare of the mine, and in order that we may be able to develop it more expeditiously than we have done heretofore. I was at the mine with Mr. Waters' report before last, and found everything going on satisfactorily, as Mr. Waters' report will show you. We are pushing the exploration on Brown's lode, and we are opening up a very good course of ore in that direction. Mr. Waters has a very high opinion of the ground in that direction. We have purchased some horses, and there are many other things, the details of which I need not go into, which we are doing for the benefit of the property. Certainly I never saw Leadhills look better at surface than it does at the present time. Now we come to the question of royalty, and in connection with that I am very pleased to find that Lord Hopetoun and his brother have been at the mines a few days before I was there. They went over the smelting-works and the dressing-floors, and Lord Hopetoun and his brother, who has been educated as an engineer, both expressed themselves highly satisfied with everything we had done at surface, the expression used by them being "all very creditably done." I need not recapitulate what was said by Mr. Southgate at Roman Graves Mining meeting to-day, where we had a long discussion on the illiberality of the course pursued to that company by Mr. Jasper More; and I am sorry to say that that feeling is re-echoed in this company. But for the great alteration in the smelting works and the dressing-floors Lord Hopetoun would not have been the great supporter of the company. We have been very patient in doing all this, and in bringing the property to its present state, and if any tenants ought to receive consideration from their landlords, I do think the Leadhills and Roman Graves Companies deserve it. Lead mining generally has, as you know, been exceedingly depressed during the past few years; and the consequence is that something like three-fourths of the lead mines of the country could not pay their way, and have had to shut up. At our last meeting a resolution was passed by the shareholders that we should communicate with Lord Hopetoun's agents on the question of the royalty, and we did so, and Mr. Waters, Mr. P. E. Wilson, and myself went to Edinburgh, and had a long interview with Mr. Hope, and I think we made such an impression on him that if it rested with him we should have got the reduction we asked for. I saw him again the week before last in Scotland, and he (Mr. Hope) seemed favourably disposed; but my colleagues and myself are sorry to say that we have not been met in the fair spirit that we deserve. It is very important and I really do not know two lead mines in the country that had been so illiberally dealt with as Leadhills and Roman Graves. The question is a very important one, and in all probability it will come before the House of Commons, the idea being that some great alteration must be made in the mining leases in this country. It is a matter of absolute necessity that something should be done if mining in this country is not to go to the wall altogether. There is a very strong feeling at the present time that the royalties should be paid—on the system which the Duke of Buckingham, I believe, and others have granted—on the profits made, and not on the produce, and that is certainly what should be done in all fairness. I do not think there is anything more that I need bring before you excepting that we are working rigorously notwithstanding all these difficulties. We are keeping a very large number of men in sinking shafts, driving levels, and opening out the mine. In one part of the mine we have been driving for the last six or seven years without finding anything productive; but it is now looking very promising, and we hope something good will come of it.

Mr. DON: Is that the long adit?—The CHAIRMAN: No; I mean the development of George's Roust Mine. The cost of the removal of the wheel will be about 200*l.*. Of course we have a very heavy stock of pig-lead on hand, and on the mine, and if we get a rise of 2*s.* or in the price of lead it will materially improve our position. However, we must take things as they are, and all we can do at the present time is to give you a dividend of 3*s.* 6*d.* per share. I find that several of the shareholders have been to the mine, and have expressed themselves highly pleased with everything they have seen. There is, I may say, quite a new feature springing up in connection with Leadhills. An extraordinary spring has been found, and a very large number of people have been up to drink the waters there during the present year. I think it is very likely that if some of our shareholders were to visit there they would be benefited by the waters, and they would see the property at the same time. I hope that many more of the shareholders will pay a visit there, for I am sure they would be pleased with all they saw there. I now beg to move that the report and accounts be received and adopted.

Mr. TUFNELL SOUTHGATE seconded the motion. Mr. GLEN: Have you any objection to read Lord Hopetoun's reply to your letter?—The CHAIRMAN: No; you can read it with pleasure. It is in general terms, and says that he does not see his way to make the reduction. The reply is from Colonel Hare (his lordship's agent), and Mr. Glen was shown this letter. Mr. GLEN: I know Lord Hopetoun to be a most liberal man, and I cannot understand it at all. I was a tenant of his lordship's, and I always found him to be liberal. Mr. DON: Can you suggest any means of getting directly to Lord Hopetoun?—Mr. GLEN: I cannot; but I really cannot but think that the case has not been laid before Lord Hopetoun himself, or he would see for himself the present position and depressed state of the lead trade.

In his report presented to the meeting the agent, Arthur Waters

(Sept. 29) says:—Mr. Peter Watson, your Chairman and managing director, with myself, visited the mines recently, and went fully into all questions and points as they came under our notice during the time devoted to an inspection of the very extensive and elaborate surface plant and works, and subsequently discussed the present condition and future outlook of your property from notes made underground in the presence of Messrs. Newbould and Aitchison. Following the usual order, I will now endeavour to give a descriptive account of what we saw underground, and what we expect to see in the future, and afterwards try to make plain to you how and where considerable sums of money have been spent at surface to provide motive power for winding, crushing, driving machine jiggers, round buddies, and other necessary appliances of a modern type, which are now almost complete, and adequate to the requirements of a great run of mines like these, even were the output to considerably exceed that of the year mentioned in the balance-sheet now in your hands.

The underground department is then fully referred to, and it is then added:—It will be seen by the foregoing that all the operations underground have been vigorously pushed forward—in fact, the various levels throughout the mines have been driven in the aggregate 309 fms. 0 ft. 4 in. Shafts and winzes sunk 25 fms. 4 ft. 7 in., and the ground out for pit and wheel-pit at Jeffrey's 28 fms. 1 ft. 3 in., exclusive of all the ground taken away in the stopes during the years 1883-4.

At Wilson's shaft there is one of Fowler's splendid compound engines, 30-horse power nominal, which winds all the stuff in Brown's Mine, from Gripp's to the 85, and is quite equal to bringing up twice or thrice the present output. Large and convenient kilns have been built here, into which the stuff is trammed direct from the shaft, and then washed and classified previous to removal over the new horse tramway to the crusher and dressing-floors at Reid's shaft. In close proximity to the latter shaft there is another of Fowler's compound engines of 25-horse power nominal, arranged for winding, crushing, and driving machine jiggers, round buddies, and so forth, in addition to which it pulls the whole of the waste discharged by every machine on the floors over an incline tramway on to the mountains immediately at the back of the works, where there is plenty of tip room. These floors with all their arrangements are quite equal to present needs, and if Brown's lode along Gripp's south, and in levels below should yield increased returns (and we think it will), we have plenty of motive power and room to extend dressing appliances to meet all requirements.

At the smelting works considerable improvements and repairs have been carried out in the building of a stone bridge, arched in the usual way, from the main road over the Burn into the ore bin or store-house, in addition to the number of pits to catch the fume from the flues and condensing chambers, as well as in adopting increased facilities for catching fume in the said chambers. Repairs to the long length of flue from furnaces to the chimney, and in making the latter secure from rain, wind, and lightning, have all recently been done. Your group of mines, embracing so many lodes, is a big property, and we, your servants, should once a year, at least, try to lay before you clearly, in detail, the manner in which it has been developed, what each portion of it is like to-day, and what may be expected of the entire group in the future. I have tried to accomplish this, as well as to explain how and why considerable sums of money have had to be spent at surface in bringing the mines into their present condition, which I consider will bear comparison with any similar works in the kingdom.

The report and accounts were then unanimously adopted.

Mr. ROGERS proposed the re-election of Mr. E. Ashmead, F.C.A., the auditor.—Mr. BAILEY seconded the proposition, which was carried.

Mr. ASHMEAD: I thank you for reappointing me auditor for the coming year. I have been your auditor from the commencement of the company, and I have really great pleasure in stating that the books of this company are remarkably well kept, and that everything is clear and in perfect order.

The meeting then closed.

## ROMAN GRAVELS MINING COMPANY.

A meeting of shareholders was held at the offices of the company, Finsbury Circus, on Wednesday.

Mr. TUFNELL SOUTHGATE in the chair.

Mr. FELIX F. WILSON (the secretary) read the notice calling the meeting. The report and accounts were taken as read.

The CHAIRMAN said he somewhat regretted that they had not the pleasure of meeting on the grassy hills of Shropshire, where they would, no doubt, have spent "a happy day;" but the circumstances detailed in the report would sufficiently account for calling the meeting in London. The mine, as he had often stated, looked as well as ever it did; but the low price of lead was the great thing which affected the shareholders very materially. On that point he did not know that he could say anything more satisfactory than at the last meeting. The price of lead still seemed to be at a very low ebb, and, as far as he knew, he did not know that it was going to improve. They must hope for better things. A great many mines in Spain were being closed, which would materially affect the supply of lead to England. He also heard that the Germans were raising ore which came over here at considerable loss, and he did not think they would persist in doing that very long. However, whether that be so or not, he hoped it would have some material effect, and that the commodity in which this company was interested would return to its normal price some day or the other. As regarded the amount of royalty paid by the company, he was sorry he could not say anything of a satisfactory nature on that subject. Since the last meeting the directors had approached the landlord, Mr. Jasper More, on the subject, and Mr. More, instead of meeting them in an equitable manner and discussing the matter, handed out a list of all over England had made reductions in rents to the extent of 20, 25, and 30 per cent., and why, because this company worked underground instead of on surface they should not be entitled to some consideration he could not tell. Mr. More stated that he felt the pinch the same as the shareholders, and that the pinch affected him in the same way. That statement was true in the letter, but it was not true in the spirit, because he would give them a few figures which would show that in 1875-76, when the company's profit on the ore was somewhere about 7*l.* per ton, Mr. More's royalty averaged 22*s.* 12*d.* per ton, while in the year 1883-84, when the company's profit had gone down from 7*l.* per ton to 14*s.* 2*d.* per ton, Mr. More's royalty had only gone down to 12*s.* 11*d.* per ton. Therefore, his fall was nothing compared with that of the company. During the last 12 months the company had earned about 1700*l.* or 1800*l.*, and during that time the shareholders had been paid nothing, but during that same period Mr. More had received 1482*l.* This was not equitable, and Mr. More had not met the thing in a fair spirit as they thought he would have done. He did not hesitate to say that unless the lords of mines came forward, and met the altered circumstances of the situation, such a reduction of dues was necessary if they wished their property to be worked. He thought that Mr. More had every reason to be satisfied, inasmuch as since 1871 the company had paid him over 30,000*l.* for royalties, and during the past year they had paid him over 1400*l.*, which was a large income. The view that Mr. More took—that he suffered equally with the shareholders from the low price of lead—would not hold water for a moment. The company's profits had gone down from 7*l.* per ton to 14*s.* 2*d.* per ton, while Mr. More's had gone down from 22*s.* 12*d.* per ton to 12*s.* 11*d.* per ton, and during the past 12 months Mr. More had had over 1400*l.*, while the shareholders had had nothing. Whether Mr. More would be accessible to any further communications he did not know.

Mr. J. CATTLEY STEWART: Will he not discuss the question with you?

The CHAIRMAN: No. Mr. More was like a certain gentleman who held a certain bond, under which he was entitled to so much, and he was determined to have it. Shareholders must quite understand that if in future mines were to be successfully worked in Great Britain efforts must be made to get the royalties reduced. They could not compete with the foreigner unless this was done, and as soon as the lords understood that as well as the shareholders the better. There was every reason to be satisfied with the present condition of the mine. He would next refer to the question of dividend. As a large shareholder and the Chairman of this company, nothing would give him greater pleasure than to announce that the directors had declared a dividend, and that the affairs of the company were in a better position than shown in the report. But on the question of the desirability of declaring a dividend, the directors of the company had decided to take the shareholders into their consideration, and to take their views upon the question as to whether the suggested dividend of 2*s.* 6*d.* per share should be paid or not. The directors had not themselves declared the dividend, because they preferred that the shareholders should themselves consider the matter, and understand exactly how the matter stood. The company's reserve fund stood intact, and was absorbed by the purchase of the Graves farm and mill, and by the cash in hand; but over and above that, the directors would be able to pay a dividend of 2*s.* 6*d.* per share to-day, and still have sufficient funds to carry on in the future. Whether it was advisable to pay such a dividend it was for the shareholders to consider. He might mention that he had received two or three letters from small shareholders, expressing the opinion that it was not advisable to pay a dividend. In conclusion the Chairman moved the adoption of the report and accounts.

Mr. SAMUEL YORK seconded the motion. He would ask whether Mr. Jasper More had applied to this company soliciting their sympathy on behalf of the working men of the district? He believed Mr. More had called together a large number of gentlemen for the purpose of relieving the distress in the district. He asked whether this company had contributed any funds towards the relief of the distress? He believed that the amount which Mr. More had given was a mere bagatelle although he had been in receipt of such large sums. In these hard times many landlords had been generous to their tenants, but Mr. More had not been generous to this company, which was one of the best of tenants. He thought royalties should only be paid on profits and not on produce.

The CHAIRMAN said that the directors had no communication from Mr. More on the subject of subscribing to a fund for the relief of the distressed miners.

Mr. CATTLEY STEWART said he had for some years past drawn up a list of the shareholders to the question of royalties, and pointed out "that without a rearrangement of the great labour question there was no chance of many men paying. He was not listened to much at the time, but time was now proving the truth of what he said. This undertaking had been managed with sagacity and skill, and yet the directors were obliged to point out that in this particular the mine was gradually going down the hill of prosperity. As regarded a dividend he confessed he had a lingering desire for a dividend, but before he voted for it he should like, in the first place, to know whether it was approved by the directors, and, in the second place, whether it would be wise to pay it. Until things



took a turn for the better. It was necessary to keep down the expenses as much as possible.

Mr. GATTY asked why there were no accounts?—The CHAIRMAN said this was the half-yearly meeting, and the accounts were not rendered till the yearly meeting.

Mr. GATTY said they were returning 200 tons of ore per month, and he urged that, looking at the present depressed price of lead, it was not advisable to return this large quantity of ore. They had better reduce the output, and under the circumstances not pay a dividend on the present occasion. He asked how long the lease had to run?—The SECRETARY said 16 years.

Mr. GATTY: What are the monthly costs?—The SECRETARY: About 900l. Mr. GATTY urged upon the board to stop the working of the mine as much as possible consistent with keeping it in order. When things improved they would be able to sell the lead at a larger profit.

The CHAIRMAN said that under the lease they were bound to keep 57 able miners underground. The instructions of the board were to economise in every way. A SHAREHOLDER: What number of men are you employing now?—Capt. WATERS said about 165 hands. The monthly costs had been reduced to about 900l. Mr. PETER WATSON said they had reduced the returns in proportion to the reduction in the costs, which used to be about 1300l. or 1400l. per month.

Mr. GATTY asked whether that reduction had been effected by stopping the exploration works?—Capt. WATERS said the ends had been kept well in advance of the stops, and they were not working out the reserves. They were now driving the ends with two men instead of six, but even with this reduced force they were keeping on the level sufficiently forward to open up the ground properly. If there came a better price for lead they could put on six men again and increase the returns.

Mr. PETER WATSON said that as a matter of fact they had in driving discovered as much ore as they had taken away. They had not reduced the reserves, but had opened as much ground as they had taken away.

Mr. GATTY thought it would have been better to have kept six men driving. It seemed to him that when the price of lead rose the stops would be exhausted. Capt. WATERS said there was no lead mine in the world where the ends were more in advance of the stops than in Roman Gravel, and, therefore, why should they go on opening levels. If the mine were his own property he would not have had the ends so far in advance of the stops.

Mr. GATTY: How long will it take you to exhaust the reserves at the present rate of working?—Capt. WATERS: We shall not exhaust the reserves till the end of the lease.

Mr. GATTY said he estimated they had about four years of reserves. For his own part he would not take out 1 ton of ore more than they could avoid.

The CHAIRMAN: We have not, and the proof is you have had no dividend.

A SHAREHOLDER said he fully endorsed the policy of cutting down expenses.

Mr. PETER WATSON said the costs had been reduced from 1400l. to about 900l. a month. But there were the big pumping-engine, the windi-engine, the crushers and so on to be kept going, then there was the carriage of the ore to Minsterley, and the men to be paid, and looking at all these things he did not think anyone could say that the cost of 900l. was too much. He and Captain Waters had gone through every item, and compared them with those in Leadhills, and certainly the expenses were exceedingly low. No one was more anxious than the directors were to keep down the costs; and he did not see how, consistently with the proper development of the mine, the costs could be kept lower.

The CHAIRMAN said that with 100 tons per month they could not pay expenses, and as far as engine work and so on was concerned, it did not cost more to raise 200 tons than 100. However, what Mr. Gatty had said would have the best attention of the board. They would consistently work the mine for the benefit of the shareholders, and not for the benefit of Mr. Jasper More's pockets.

They were greatly dependent on Capt. Waters, who had served the company faithfully and well.—Mr. PETER WATSON said he thought that Mr. Jasper More had done serious injustice to the Shropshire hills in not meeting the wishes of the company. He condemned Mr. More's conduct from beginning to end. There was no industry in this country more deserving the consideration of landlords than the mineral industry, and especially that of lead, in which there had been the greatest reduction of price. He considered the conduct of Mr. Jasper More as almost cruel. When this company took the mine there was nothing but a broken down engine upon it. Since then the company had laid out large sums of money upon it, and had laid it out for a permanency; and if this had not been done Mr. More could not have had the profits which had been paid him by the company. Mr. More seemed to have overlooked the facts. Such treatment as the company had received from Mr. More deserved to be known in the House of Commons. Since Mr. Davy, the member for West Cornwall, used to appear in the House, the mineral industry seemed to have no friend there, although the Right Hon. Mr. Chamberlain was a shareholder in this mine. The matter really required serious consideration, or British metal mining would, as the Chairman had said, become a thing of the past.

The resolution for the adoption of the report and accounts was then put and carried.

The CHAIRMAN said that, having heard the expression of opinion of the shareholders, the board would take into consideration the question of declaring a dividend.

On the motion of Mr. CATTLEY STEWART, seconded by Mr. S. YORK, a vote of thanks was passed to the Chairman and directors, and the meeting broke up.

#### PRINCE OF WALES MINING COMPANY.

A four-monthly meeting of shareholders was held at the offices of the company, Gracechurch-street, on Thursday.

Mr. J. Y. WATSON, F.G.S., in the chair.

Mr. C. B. PARRY (the secretary), read the notice calling the meeting, and also the minutes of the last general meeting, which were duly passed and signed by the Chairman. The accounts showed that the labour costs had been 1223l., the merchants' bills 404l., the lord's dues 32l., and discounts 38l. The sale of tin ore realised 390l., and of copper 199l.; total 589l. The total balance of liabilities over assets was 1481l. The agent's report stated that since last meeting they had put up No. 2 rise in the back of the 102 fms. level 3 fathoms, and communicated it with the 90. It was thought at the last meeting that as soon as this had been accomplished it would be difficult to drain the run of tin ground as to stop it at once, but up to the present it had been difficult to do so in consequence of the water issuing so strongly from it, but it has now abated, and appears almost drained, so as to enable stopping to go on from the bottom of the 90. It is evident that this run of tin ground has already taken an easterly dip, and that the 102 is now entering it. Since this rise has been holed the 102 fms. level has been driven east about 8 fathoms on a level varying in size from 2 1/2 to 3 ft. and worth from 4l. to 50l. per fathom for tin, and in places producing good patches of copper ore (lode now 5 ft. wide), worth 20l. per fathom for tin. Stope in back of the 102, lode 4 ft. wide, worth 7l. per fathom for tin, and also producing a little copper ore. The 90 west has been extended on the course of the new Silver lode 11 fms. In order to be certain that the main lode has not broken off north from the silver lode we have put out a cross-cut north 2 fms., but see no signs of it in that direction. He (the agent) is more than ever convinced of the importance of driving on the course of the new Silver lode to reach the western point of junction of both lodes. The costs will be small, and the prospects in the western undeveloped ground very good. There are six tribute pitches working by 18 men on the Prince of Wales lode, and two pitches by four men on the Good Luck lode. In concluding his report, Mr. Roberts (the agent) said he would recommend driving the 102 east with a full crew of men, stop the back of the same on to work, and stop the bottom of the 90 as soon as possible on tribute, and all other tribute which may be worked.

The CHAIRMAN said: At our last meeting, on June 19, you will remember it was determined, in order to reduce the costs of working, that operations should be confined to two pioneer levels—the 90 end west and the 102 end east, also to set such pitches as might be thought desirable, and it was estimated the cost of this work would be about 200l. a month, and the returns about 100l. to 150l. Even at that time, however, the costs on the old scale for the month ending on June 7, payable in July, as well as part of that up to July 5, and payable in August, had been incurred, and as stated at the time, and the former was 519l. 15s. 9d., the latter 390l. 17s. 4d. Thus we come before you to-day with a very small reduction, the actual costs of the four months having been about 1600l. The ore sold and belonging to the new Silver lode have realised 589l. 13s. 9d., or rather over the estimate, while those on the mine reduced the loss on four months' working to about 577l., and we have a balance against us of 1470l. 15s. 10d. At our last meeting the balance against us was 1556l. 13s. 1d., and as we only made a call of 1133l. 16s. a part of the old debt, equal to 375l., swells up the present balance. In the report of the committee to that meeting reference was made to the 90 east, where a course of ore had been gone over for 20 fathoms in length, worth 24l. to 25l. per ton, and which when opened out by a rise from the 102 was expected at once to open out a large section of ore ground that would materially assist the returns. This ore the agent found afterwards, when holed the rise (and seeing that it did not drain the ground), dipped away east, and the late discovery in the 102 end east, some way further east than the rise, proves this to be the case, and the ground will soon be available now, while the late discovery in the 102 fathom level east greatly enhances its value. This discovery at first was worth 50l. per fathom for tin (verified by an independent agent) and the lode has been opened upon since the discovery nearly 2 fms., and the end is now worth 30l. per fms. for tin, and 40l. for copper, and the agent who is present will tell you, every prospect, and even of improvement. Now, I have gone carefully into this matter with Captain Roberts this morning, and the main question I put to him was this:—Looking at the 20 fms. of ground gone over, and still standing in the bottom of the 90 all untouched, and supposing the lode holds as good as it is now in the 102 end, can you pay the costs of the mine? His answer was—"There can be no doubt of that in a month's time, as the end gets advanced for stops in the back." In the 90 fathom level west he is still looking for a discovery. There is one other matter I wish to refer to. On Friday last a strike of the engine broke. The agent, in a letter never intended for publication, mentioned this to the office. The secretary was not in town, and upon the letter becoming known, the shares were upon the sale of 20, as I understand, knocked down 4s. per share, and this "drop" was published in all the papers next day. Now, as Capt. Roberts will tell you, the total cost to the company of this breakage was under 2l., and no damage whatever was done to the mine. Yet, by the sale of these 20 shares and this paltry accident, the property was depreciated to the extent of 1600l. I will only add this. Since our last meeting I have increased my holding, and am as sanguine as ever as to the result, though the calls are not altogether pleasant.

Mr. A. THOMAS asked the agent several questions with reference to the 102 and 90, and read a letter from his own agent, who at his instructions went underground on Monday last, still giving that most favourable change had taken place in the 102. The lode after that was from 2 1/2 to 3 ft. wide, which he valued at least at 25l. per fms. and there was every appearance that a still further increase would take place.

Mr. ROBERTS admitted that since he had made his report in which he valued the lode at 20l. it had been better, and he now agreed with Mr. Thomas's agent that it was worth 25l.

Mr. THOMAS thought that the prospects of the mine were not very much

better than they had ever been before, and he had said all along from information he had received from men who had inspected the mine—Captain George and others—that this would turn out to be a tin mine. Even after they had found bunches of copper they always thought it would turn out to be a good tin mine. In his (Mr. Thomas's) opinion what they had now to do was to push on with the 102 east and the 90 west, and then if they found a considerable quantity of tin ground there the shaft would have to be sunk deeper.

The CHAIRMAN then moved that the report and accounts (which were taken as read) be adopted, which was seconded and passed unanimously.

Mr. WAGSTAFF then proposed that a call of 2s. per share be made, which would realise about 1100l.

A SHAREHOLDER said he thought 2s. 6d. per share should be asked to wipe off the debt against the mine altogether.

Ultimately it was agreed that for the present, at any rate, only 2s. should be the call, and the motion was seconded and carried.

A vote of thanks to the Chairman brought the proceedings to a close.

#### HORNACHOS SILVER-LEAD MINING COMPANY.

An adjourned meeting of shareholders and debenture-holders was held at the Cannon-street Hotel, on Wednesday, Mr. SCOTT in the chair, to receive the report and accounts.

Mr. RICHARDS (the secretary) read the notice convening the meeting.

The CHAIRMAN said that at the last meeting it was moved and seconded that, in the absence of any financial statement, the meeting should be adjourned for a fortnight, and in accordance with this resolution we have called the meeting to-day, and put into your hands a financial statement and report from Mr. Rickard as to the position of affairs. He went on to say—I have little to add to-day to what I said last time I had the pleasure of meeting you, but simply refer you to the financial statement, which, I think, fairly shows how we stand. In case you should require any information upon any of these points I would, with your permission, ask Mr. Rickard, the secretary, to read a statement which he has made of the position of affairs, and also the amount of money which we want you and the shareholders not with us to-day to subscribe under the present position in which we find ourselves; and I think that when you have heard the statement of Mr. Rickard it will give some ground for a discussion amongst us, and I shall be exceedingly pleased to give any information you may demand, and I hope that the result of our meeting to-day, small as it is, will be to take us out of this unsatisfactory state of affairs, and to put up—Mr. Rickard, our engineer, was a board, and you as shareholders and debenture-holders—in a happier state of mind. I must confess that I am exceedingly reluctant to address you in this strain, in this apologetic tone, and to be always asking you for money. It has been the history of the company from the beginning, and I should hope that having nearly realised the expectations held out to us by Mr. Rickard provided we supplied a certain amount of money, to apologise should be no longer necessary; but that in the course of a few months the mines will be yielding certain results which will pay working expenses and give some returns beside, however small. I can assure you, gentlemen, that this is the very last time I shall ask you for money, but I am in the hope that we have now seen the very worst, and from henceforth turn the corner.

Mr. RICHARDS then read the statement, which was as follows:—The last financial statement was made up to Dec. 31, 1883, and submitted to the meeting of share and debenture holders on Feb. 28, 1883. The statement now before the meeting includes the expenditure to Dec. 31, 1883, and shows in separate columns the amount belonging to the ordinary share capital, and the amount of the amount estimated as necessary of 7000l. He then read from the financial statement the figures making up the new campaign expenditure to Oct. 31 of the present year:—Total, mines, 5643l. 14s. 5d.; London, 802l. 10s. 6d.; 6506l. 4s. 5d.; leaving for contingencies, 493l. 15s. 7d. = 7000l. Of the above amount of 6506l. the amount of 4600l. has been paid, leaving to find 2340l. to complete the 7000l. Before proceeding to submit to the meeting a proposal as to how this money is to be found, the directors think it will be well to give an account of their stewardship with regard to the actual cash receipts and disbursements since the date of the last financial statement, Dec. 31, 1883. As the shareholders are aware, the new issue of debentures dates from Feb. 28, 1883. The receipts from Jan. 1, 1883, to Sept. 15, 1883, were shares, 2409l. (total paid up 144,748l.); debentures, 12,241l. (total debentures, 21,841l.); sundry sales, 54l. 17s. 6d.; loans, 810l.; ore sales previous to new campaign, 687l. 18s. 1d.; new campaign, 771l. 3s. 1d. = 14582l. 13s. 2d. = 16,973l. 10s. 8d.; to which add balance in hand, January, 1883, of 251l. 6s. 9d., making the total receipts 17,224l. 17s. 5d. The expenditure prior to new campaign—Old debentures paid off (Mr. M.) 400l.; plant and machinery, including liabilities, Dec. 31, 1882, 1425l. 11s. 10d. Remittances to mines—Old liabilities and expenditure not belonging to new campaign, 5503l. 18s. 11d.; payments in cash to Mr. Homedes (2000l.) in settlement, (bill for 1306l. still unpaid) and office rent, manager's, secretary's, and clerk's salaries previous to new campaign, 2728l. 6s. 11d.; London office expenses 423l. 19s. 1d.; travelling expenses, 131l. 5s.; engineer's fees, 106l.; legal expenses, 59l. 4s. 2d.; debenture interest, 1733l. 13s. 5d. (total prior to new campaign, 12,563l. 19s. 4d.). New campaign—Remittances to mines, 3844l. 10s. 6d.; salary agent at mine, 277l. 10s.; engineer's travelling expenses, 50l.; engineer's fees, 225l.; office rent and secretary and clerks, 262l. 10s. (total new campaign, 4659l. 10s. 3d.) = 17,223l. 10s.; leaving a balance in hand, 17s. 5d. As to providing for the balance of the 7000l.—about 2340l.—there are unplaced debentures amounting to 3120l. It is proposed to place these to provide for above amount of 2340l., and take up Mr. Homedes's bill of 186l. = 3486l., leaving a deficiency 526l. to be made up from amounts unpaid on debentures, 302l.; and balance on calls, 474l. = 511l.

Mr. RICHARDS (the solicitor) said the amount of debentures was 21,841l. All the debts in Spain had been liquidated. The money that they were asking was to carry out the campaign entered upon by Mr. Rickard—7000l. They were not asked for anything new, but for money to carry out the experiment entered upon last November. Certainly the debenture holders had a right if they liked to throw the company into liquidation, but those who had been seen had agreed—as he thought in their own interests—to stand by the company, and to carry out the arrangements made last year when they thought it pity for the company to go into liquidation, and all that the liquidation could do was being done by the directors that is spending a sum of money upon the mine to bring it into a more valuable position, and he thought that if the money was forthwith subscribed the mine might be in a position to make returns in three months.

The CHAIRMAN regretted the apathy of the shareholders; out of 300 or 400 only two were present with them who were not debenture-holders. He thought it was a great pity that for the sake of 3000l. or 4000l. they should be in this position. A friendly petition was on the file to wind-up the company, but it would not be pressed if there was a chance of carrying on the company satisfactorily.

Mr. RICHARDS, the engineer, then made a statement, in which he said all that he had promised the company to do he had performed within the time, and within the money stipulated. If the shareholders supplied him with money to the extent promised he would carry out what he had promised, as he had done thus far, if not they must take the responsibility upon themselves. Shortly after the commencement of work they would be able to turn the scale, and instead of sending money out of England, would send it home from the mine for the benefit of the shareholders.

Mr. RICHARDS said that the mine was suffering from the want of working capital to pay wages, &c.

The CHAIRMAN said that great praise was due to Mr. Rickard for what he had done. It was decided to sell about 2000l. worth of the machinery, and 850l. worth had been sold already; but Mr. Rickard said, do not sell it, you will want it yourselves.

Colonel RICH said it was useless renewing appeals for money; they had been made over and over again. He thought the directors had worked hard and made over their best, and for that reason deserved their support, and he was willing to give his mite towards the sum required. He could not believe that the mine in its present condition was unsalable. Surely others could see as well as Mr. Rickard that by the expenditure of more money the property would pay. He thought that in the event of their not being able to raise the money they ought to get a good price for the mine.

The subscription list was then opened, and the total amount of 930l. was proposed on condition that 1400l. should be raised. It was suggested that personal application be made to the shareholders instead of a circular being sent.

The CHAIRMAN said he was exceedingly obliged to those who had subscribed; he thought they had behaved well, and had given them great encouragement. They would do all in their power to get the rest of the money.

A vote of thanks to the Chairman brought the proceedings to a close.

#### BURNHOPE LEAD MINING COMPANY.

The first general meeting of shareholders was held at the Royal Hotel, Blackhill, Durham, on Sept. 24.

Rev. W. FEATHERSTONHAUGH in the chair.

The CHAIRMAN explained that this was the statutory meeting, so that there were no accounts to present, but he would read the report of the directors' report as to the operations going on at the mine:—The men in the top level who are working on tribute are raising very fine galena ore in the headings of about 2 to 3 tons per fathom, and they are also getting good house work at the outcrop of the top sills going north. The engine-shaft has been sunk to the bottom of the Pattinson sill, a depth of about 220 ft., and a level is now being driven north on the main and south vein by a partnership of eight men, and this level is now about 8 fms. from the main east and west vein running down the valley. In driving this level we came upon lead ore under where the rich deposit was found in the top sills, and in several places we have a rich soil of lead ore going down under the level sole near 1 ft. wide, which speaks well for the limestone sills below; at present, the vein in this level is from 5 to 6 ft. wide, mixed through and through with lead ore, spar, and mende, and the house from this level alone, worked by the eight men, is keeping the present crusher and washing-floors fully occupied, and we cannot dress the ore properly, the machinery not being adapted. We are laying on a good deal of stopeing ground above this level, and when the intersection is made with the east and west vein, and a rise put up at this point into the top level will air the whole mine, then a larger number of men will be required to work this ground, already proved good at the north boundary of your royalty. In order to prepare for a larger output of ore the directors have now fixed upon erecting the new Blake's stonebreaker and the large crushing mill now on the ground, and have completed a contract with Messrs. Davison and Co., of Hexham, for their erection, together with four new jigg machines and classifiers on the most improved principle, to be worked by your 40 ft. water-wheel, and when completed will make first class dressing-floors, and save a great amount of labour and cost, and do away with the crushing by your portable engine. The circular bin also purchased at the Darwent Mines are being erected, and one of them will be ready for work in a few days. They have been put down in a proper position for the new dressing-floors. We are busy cutting a new water level from the engine-shaft, which will bring the water pumped from the mine on to the new dressing-floors, and this in a dry season will be a great benefit, and economise your water from the reservoir for crushing and winding with the water-wheel. The pumping-engine and machinery continues to work

appliedly, and we have not only been able to command the water in our own mine, but have reduced the back water in the adjoining mines to a large extent, during the time we have been opening out and developing the mine the price of lead has been very low, and now that we will soon be able to send large quantities of lead ore to the market we trust the small rise will not only be maintained, but go on and further improve, and we think there is good reason for believing this will be so, taking into consideration the small stocks on hand, and lessened production in all countries.

The directors retired from office, and on the motion of Mr. Adamson, seconded by Mr. SACKED, they were unanimously re-elected. Mr. Leybourne was also re-appointed managing director.

The proceedings terminated with the usual complimentary vote of thanks.

WEST FRANCES.—A four-monthly meeting was held on Thursday Mr. Walter Pike (the purser) presiding. The labour cost amounted to 3607l. merchants' bills 1574l., and bankers' charges 213l. The credits included black tin sold, 127 tons, 5570l., and extra carriage 18l.; total credits, 5590l. This left a profit on the four months' working of 195l., and a balance in favour of the mine of 511l. The agents reported that the rise above the 174 is up 104 fms., and the lode for the whole distance averaged 112 lbs. tin to the ton of stuff. They have suspended operations on the new shaft until they have proved the nature of the granite above the rise. They were discovering four times as much tin as they were taking away, and there was no doubt that they were opening up one of the richest bunches of tin in Cornwall. The Chairman said that Col. Fortescue, one of the lords of the mine, had granted a new lease of Grasso's tenement at 1-1/2th of the old rent. During the recent depression the agents and officials had voluntarily consented to a reduction of their salaries, and it was now resolved that they be increased to what they were formerly.

CAMBORNE VEAN.—A special meeting was held at Redruth, on Thursday, Mr. T. Fidler, of Newbury, presiding. At the last meeting it decided to bring out the mine on the Limited Liability Principle, if possible, and it was left in Mr. Fidler's hands to negotiate the matter, and he now would report what he had done. He said that, in the first place, he had had a good deal of correspondence with the mine, and the outcome of which was that they had promised them a lease for 30 years—that is to say for 21 years certain, and renewable year by year to the end of the term on the surrender of the present lease. So long as the mine did not pay dividend, the lords would be content with very small royalties; but when they should come to pay dividends, they would for the first 15th years. After applying to their firms unsuccessfully to bring out the mine they had brought out 40,000l., he thought they had better bring out their own mine themselves. He was going to send out 50,000 circulars, which would cost 2500l. to 3000l. He thought that the 6000l. to be paid to the present directors a very moderate sum indeed. The necessary outlay to bring the mine into a dividend-paying state was 25,000l., or 10s. per share on 50,000 shares—5s. to be paid on application, and 5s. on allotment. If more money would be wanted these 5000 shares would be subject to a further call of 10s. per share in instalments of 2s. 6d., at intervals of not less than six months. He allowed 4000l. for the cost of floating the mine; the whole preliminary expenses he guaranteed not to exceed 1000l. The name of the mine was to be changed to the West Dolcoath. Mr. Vivian directed attention to the fact that the prospectus stated that it was to acquire property in Cornwall or elsewhere in England. He objected to the word "elsewhere," which would place the property out of the jurisdiction of the Statutory Code. A resolution was passed directing the Chairman, the purser, and the manager to wait on the trustees in respect of the terms under which the new lease could be granted. A resolution was also passed granting the Chairman 400l. as preliminary expenses towards issuing the prospectuses. The terms of the company was the trustees to agree to a lease of 42 years, a remission of the first year's dues; while the mine is not paying dividends dues at 1-10th, when paying dividends dues at 1-30th.

WHEAL JANE.—At the meeting on Sept. 26 (Mr. J. C. Daubus in the chair) to receive and consider the replies from the lords to the offer made to take the materials at a valuation, it was stated that the offer made was in each instance refused, as was also the request made to Lord Falmouth for permission to abandon for the present the lower workings, and to confine operations to that portion of the mine above the adit. Under these circumstances the Chairman thought there was no alternative but to draw to surface the pitwork and materials. He requested the action of Lord Falmouth for it was thought they might keep the mine going for the benefit of the neighbourhood if allowed to work above the adit. Resolutions were passed authorising the abandonment of the mine, and empowering the committee to take the necessary steps for the relinquishment of the mine.

BULL'S IRON AND STEEL COMPANY.—At the annual meeting at Liverpool, on Tuesday (Mr. Bull, the Chairman, presiding), thereport alluded to the failure of the efforts of the directors to start branch companies at Sheffield and in America owing to the shareholders having failed to pay their instalments when due. Both companies now stood in abeyance, but the work done and the land purchased remained the property of the parent society. An influential and strong company had been formed, and were now erecting a blast-furnace to work the process of Trimmer, South Wales. The directors believed the success of the company would be quickly realised after starting the South Wales furnace.—Mr. W. A. Barrett asked further information as to the cause of the failure of the Sheffield and American companies. He thought the shareholders were left completely in the dark as to the state of the company. How was it that shares appeared in the balance-sheet as having been issued at a premium when they had been offered to him at 7s. 6d., and were known to be hawked about by Mr. Williams wanted to know how it was that in a company with a nominal capital of 40,000l., only 1478l. of which had been paid, shares had been issued at a premium of 17s. He thought the "balance-sheet no balance-sheet at all, and that dust was being thrown in their eyes, and would, therefore, propose that the report should not be passed; that a committee of investigation be appointed and the meeting adjourned.—Mr. Burrows (a director) suggested that the meeting be adjourned for three months, without the investigation committee, who could really do nothing more than the directors were doing; by that time the Sheffield works would have been actually tried. The fate of the company depended upon the success of these works, but they were very confident. The meeting was then adjourned, it being understood that the report was not adopted.

SIR W. ARMSTRONG, MITCHELL, AND CO.—The third ordinary general meeting was held at Newcastle on Tuesday (Sir William Armstrong presiding). The report stated that after deducting the sum of 28,608l. 9s. 9d. for depreciation, and adding the balance from last year, there remained a profit of 153,350l. 16s. 4d. They proposed deducting for preliminary and formation expenses 31,611s. 6d., reducing the amount actually divisible to 150,199l. 6s. 5d. From this sum a dividend of 7 1/2 per cent. would be paid, of which 3 1/2 per cent. has already been paid as interim dividend, and they would carry forward a balance of 2551l. 18s. 5d. Owing to the depreciation in the value of the ore, a large stock of which the company has, they had been obliged to write off 10,000l. on the book value. The shipyard at Elswick was approaching completion, and the steel department would shortly be in operation.—The Chairman said that not many years ago the company for the dividend being smaller than last year, as in these hard times it thought a dividend of 7 1/2 per cent. was not to be cavilled at. Until the shipyard and steel departments were complete they could only be considered as in a state of imperfect development. The report was unanimously adopted, and the directors and auditors re-elected.

GAWTON COMPANY.—The accounts to be presented at the forthcoming meeting have been issued to the shareholders, and show debts for wages 3462l. 3s. 10d.; merchants' bills, 1453l. 16s. 2d.; directors' fees, 66l. 13s. 4d.; London office expenses, bankers' charges, &c., 172l. 6s.; total, 6154l. 19s. 5d. The arsenic snot sold realised 3696l. 17s. 6d.; copper ore, 212l. 18s. 5d.; total, 3909l. 15s. 11d., leaving a balance against the company of 1245l. 3s. 5d. A report from Mr. Moses Bowden will be found in another column.

WHEAL COATES.—There is a better account from this mine, and the shareholders are referred to the weekly report, which was presented to the committee at their sitting on Thursday last. The low prices of shares do not always indicate the real value of a concern, as was evident in the case of East Caradon, when the shares of that mine were at 2s. 6d. each on a discovery they quickly rose to 50l.

#### COPPER ORES.

Sampled Sept. 17, and sold at Tabb's Hotel, Redruth, Oct. 2.							
Mines.	Tons.	Price.		Mines.	Tons.	Price.	
Mellanear.....	81	42 6 0		Levant.....	76	41 10 0	
ditto.....	80	2 7 6		ditto.....	41	41 6 0	
ditto.....	79	2 14 6		ditto.....	36	39 0 0	
ditto.....	78	2 15 6		ditto.....	3	38 0 0	
ditto.....	77	2 11 6		Violet Seton.....	24	2 15 0	
ditto.....	76	2 10 0		ditto.....	19	3 0 0	
ditto.....	67	14 6		North Wheal Buay.....	4	7 6 0	
Levant.....	77	4 16 0		ditto.....			
TOTAL PRODUCE.							
Mellanear.....	532	£1293 17 6		Violet Seton.....	43	£108 0 0	
Levant.....	535	1287 15 0		North Wheal Buay.....	19	76 10 0	
Average standard.....				Average produce.....			
Average price per ton.....				£3 8 6			
Quantity of ore.....				£224 17 6			
Amount of money.....				£514 17 6			

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36 ton of 14 per cent copper ore per metre. The tribute pitches throughout the mine much diminished in yield during the past month, and we were unfortunately unable to work on available ground until our exploring works were again fairly started, hence the great diminution in the returns for the month. We have now set four new pitches, two in the back of the No. 11 level, east of the shaft, and two in the back of No. 10 level in the same direction, all of which are yielding about 100 tons of 14 per cent copper ore per metre.

**UNITED MEXICAN.**—Mr. Ray, Guanajuato, Sept. 15: Mine of El Diamante: In pozo de San Antonio the lode has diminished in width, and only measures 25 centimetres, and, at the same time, the ore is of less value than hitherto. We sold in public sale on Sept. 11 4½ cargoes of ore for \$285, and 19 cargoes of inferior for \$390. The ore was taken from the mine, and the price of the gas, sold for \$47½. We have not found anything in our workings in the cross-cut of San Pablo. In frente No. 1 of San Juan west no change has taken place in this end; the appearances of ore continue to be seen. In frente No. 2 of Santa Rosa west, the end is in the same state as it was during the previous week. In frente No. 3 of Santa Rosa, the lode is still in the same state. In frente No. 4 of a good class, of which 7½ cargoes were sold, the lode is still in the same state. In frente No. 11 of San Andres, west and east, the two ends are still unproductive. In frente No. 13 San Andres, of San Andres west, the lode is now only 40 centimetres wide, but the ore continues to be of a good class. Five cargoes were sold in public sale for \$300. In frente No. 13 of San Andres east the end is now driven on the side of pozo No. 1 of San Andres but the ore is not as rich as it has been hitherto.

In pozo No. 2 of 8 Andres the winze is quite barren. In pozo No. 5 of San Andres the lode is at present 140 metre broad, of which 90 centimetres are in ore that seems to be improving. In pozo No. 9 of San Andres the lode is 80 centimetres broad; but the ore is of an inferior class. In pozo No. 7 of San Andres the lode is 100 centimetres broad, and the ore is of a good quality. The results of the public sale on Sept. 11 about 295% cargass for \$9481, to Duran we sent 257% cargass, and we sold 1 carga 12 arrobas and 9 lbs. of bonito; this makes 654 cargass of hacienda ore from San Cayetano, which, added to the yield of El Diamante, makes a total extraction of 578 cargass of hacienda ore from the mines of the new concern.—San Antonio de la Ovejera: In frente de San Pedro the appearances are improving; last week I saw some very pretty stones, which make me believe that the mine is rich in silver. The appearance of the mine of San Antonio de la Ovejera is not so good, but I have no doubt that the mine will be rich. The Rastro of San Martin no change of appearance; in this working has been noted. Returns from the mine of San Cayetano de la Ovejera for the week ending Sept. 13 —\$11991; outlay, 3383 02. El Diamante returns—\$475; outlay, \$423-30.

VICTORIA GOLD (Venezuela).—J. Lambert, Sept 1: At the adit we have now cut through the lode, and have put men to sink on it; we are now down 15 ft. In solid blue quartz the whole width of the shaft (7 ft.), which will, according to the present appearance, yield a good quantity of ore. On the 28th of August a new discovery mentioned in my last letter, we have sunk 37 ft. in the lode, which is 3 ft. 6 in. wide at the bottom of the shaft; the quartz is rather lighter in colour, but equally rich in precious metal. It is a great pity we have not the stamps at work, even with 10 heads we could make splendid returns.

Proportions of silver that only form fractions of a thousandth per cent. can be determined in the dry way. Besides the ordinary methods, which when the proportion of silver is small require much material and time, there is another dry process, the blow-pipe test, which leads rapidly and accurately to the object required, but demands great skill and experience. Mr. CARL FOEHR, in a paper which he contributes to the *Zeitsch-für Analyt. Chemie*, explains that he makes use of a combination of the two methods for the determination of minimum quantities of silver, which gives very good results without requiring more time than an ordinary assay. The resulting bead of silver is measured on a blow-pipe gauge. Before describing the precautions and minutiae of this combination process it may be well to give a short account of the process of measurement employed in the present method as well as in the blow pipe assay.

As in the quantitative blow-pipe assay for silver 0.1 gramme=1 blow-pipe centimetre, is weighed out, the reguli, if the ore is poor, are too small to be weighed. Harkort first came upon the notion of measuring these globules and then calculating the percentage, since the weights of spheres of a metal are as the cubes of their diameter. To ascertain the latter, Harkort, and after him Plattner, made use of a narrow plate of ivory, upon which are drawn two converging lines with a maximum distance of 1 millimetre. These lines were about 15.5 centimetres in length to their point of intersection, and were divided by cross lines into 50 equal parts. In order to determine the values of this scale, Harkort proceeded empirically, since the reguli are not mathematical spheres. He determined the proportion of silver in an ore accurately, by a series of assays in the muffle, selected then the most faultless bead of silver, and moved it along between the converging lines of his scale till it touched them on both sides. At this point the proportion was noted in percentages calculated in blow-pipe assay centners.

The other values were ascertained by calculation. If the necessary precautions are observed in reading off there are obtained with the scale good results, which agree perfectly with those obtained by cupellation. It is possible with the aid of a lens in measuring to determine with ease a proportion of 0.005 per cent. of silver. Sometimes, however, in the examination of poor burnt pyrites, &c., a much higher degree of accuracy is required. This can, however, be readily obtained by a combination of both methods. The bead obtained in the muffle from, for example, 10 grammes of raw material, is measured on the blow-pipe scale, and the percentage is calculated according to the quantity taken. But since, as already mentioned, with the aid of the lens a bead may be measured that in the blow-pipe assay (0.1 gramme taken) represents a percentage of 0.005 silver, it follows that by the combination method a percentage of  $(0.005 \div 100 =) 0.00005$  (10 grms. being taken) can be quite as readily determined. Indeed, accuracy can be carried as far as is desirable. If we, for instance, combine the crucible assay with the blow pipe measurement, we may determine a percentage of  $(0.005 \div 1000 =) 0.000005$ , if 100 grms. have been taken. Besides, the combination method is much more accurate than the blow-pipe assay, since an error committed during measuring is divided by 100 if we take 10 grms., and by 1000 if we take 100 grms.

As a degree of accuracy of 1-000,000 per cent. is sufficient even for the most delicate purposes—for instance, in petrographic researches in the origin of metallic veins—this silver assay may be easily executed with the aid of a small muffle furnace, such as is generally to be found in laboratories for determining ashes, opening up ores, &c. In order to determine proportions of silver of 0.0002 to 0.0007 per cent., the author proceeds as follows:—Into a small crucible of fire-clay are put about 20 grms. of a mixture of equal parts of flour and potash. Upon this is placed the substance in question, carefully weighed (10 grms.). The whole is thoroughly mixed and covered with about 30 grms. of proof-lead, free from silver. The whole charge is then covered with sodium chloride, and the crucible is placed in the muffle, which has been raised to a cherry-red heat, and left there for about three hours at a bright red heat until all the mass has been thoroughly liquefied.

Generally only two crucibles are used, assay and check assay, placed in the muffle, and only if the silver is below 0.0002 per cent. are four crucibles used, each with 10 grms. of the substance, the reguli being scarified together. The lead reguli are generally too large to be at once driven off; they are generally scarified once, and then transferred to the cupels. In order to obtain a round even bead the operation is interrupted when the regulus is about the size of a poppy seed, and completed in a second cupel. As soon as the cupel begins to fume it is drawn a little forward, and the aperture of the muffle is opened, to prevent the bead from spitting by cooling slowly. Even the smallest beads spit if cooled too quickly. The second driving may be advantageously effected before the blow-pipe, as losses of silver are thus more readily avoided.

The bead of the silver should be perfectly bright and white; it is carefully, and without great pressure, removed from the cupel by means of a forceps and a pointed knife, and cleansed by rubbing between blotting-paper. While measuring the eye, in order to avoid parallax, is kept as nearly as possible vertically above the bead, the latter lying on the same surface as it did in the cupel. The measurement is repeated at least three times, with intervals, turning the bead in the same plane. The arithmetical mean divided by 100, if 10 grms. have been taken, is the proportion of silver. Of course it is necessary before all things to ascertain whether the proof-bead used is absolutely free from silver. From 10 to 20 grms. are therefore examined according to the method above mentioned. Any silver found must then be deducted in subsequent operations. Whether the combination method is applicable with the same accuracy to the determination of gold must be decided experimentally. The method is especially suitable for very poor silicates, and requires only from four and a half to five hours for completion.

MARRIED,—Miss Constance Maude Neville and Mr. Stephen Rickard were married at St. Luke's Church San Francisco California, on Jan

**LINARES.**—Sept. 1: Pozo Ancho Mine: The lode in the 115, driving west of Warne's shaft, is opening up paying ground worth 1 ton in a fathom. In the 135, driving east of Warne's cross-cut, the lode is very regular, but does not contain ore enough to value. The lode in the 130, driving west of Warne's shaft, is large, open, and productive, yielding 2½ tons per fathom. In the 135, driving east of Peill's shaft, the lode continues poor, and the ground hard for driving. The lode in the 120, driving in the same direction, is not quite so good as when last reported, its present worth being 1 ton per fathom. In Peill's engine-shaft, sinking below the 135, the men are going on very steadily with their work. The lode in No. 252 wins, sinking below the 65, has declined in value during the past week. No. 255 wins, sinking below the 105, is going down in a good lode, yielding 1½ ton in a fathom.

**Quintenos Mine:** The lode in the 115, driving west of Taylor's engine shaft, is strong, producing good stones of lead ore worth ¾ ton per fathom. In the 115, driving east of Taylor's engine-shaft, the lode is getting more clearly defined as we get away from the cross-course, and contains spots of lead ore. The lode in the 100, driving in the same direction, has improved in value to 1 ton per fathom, and is now yielding good lumps of lead ore. In the 80, driving east of Taylor's engine-shaft, the lode is composed of carbonate of lime and good stones of lead ore, producing 1 ton per fathom. Good progress is being made in sinking Netto's winze below the 80, which is going through a rich bunch of lead ore worth 3 tons per fathom.

**LONDON AND SOUTH AFRICAN EXPLORATION.**—Advices have been received of remittances amounting to 4000*l.* for four weeks, making, with 40,170*l.* previously advised, a total of 41,170*l.* for 40 weeks ended Sept 27

**MYMORE GOLD.**—B. D. Plummer, Sept. 6: Mining Operations: The following information has been let for the month of September:—Taylor's Shaft, 53 ft. below the 173 north end, is 17 ft. wide, and is working in a level, and is set to 20 men. The lode is compact hard quartz, containing iron pyrites, arsenical pyrites, and gold; it averages 6 ft. wide, and will turn out 18 tons of stone per fathom, of which about 3 tons are picked out, leaving 15 tons; estimated to be worth 1½*oz.* of gold per ton. A stope at the bottom of the engine-shaft north on the underlie is let to nine men. The lode is 5 ft. wide, and will yield 15 tons of stone per fathom, of which about 3 tons of poor stone are picked out. The remaining 12 tons per fathom estimated to yield 1½*oz.* of gold per ton. The winze in bottom of the shaft is 17 ft. north of Taylor's shaft is 31 ft. 10 in. It is let to 18 men. The rock has a promising appearance, and I am of opinion we shall have gold in this place after it is sunk a few feet deeper.—No. 2 Winze: The side cutting to make room for the tackle, &c., is not yet completed. It is very hard, and we have had some trouble in getting men to work it. The winzes are of great importance to the future working of the mine, and we use every endeavour to keep them going. For the present I have suspended operations on the west lode, and the west shaft, and have directed the men to cross-cut towards the west lode one to the forehead of the 173 north end on the east lode. This has two objects,—one to assist in ventilation, and the other to prove the value of the west lode about 110 ft. north of the present forehead.—The 173 North end on the East Lode: 17 ft. was driven last month. It is again set to six men. There is a little more iron and some quartz, otherwise there is nothing new to report here. The machinery works well, and everything goes

**NEW EMMA SILVER.**—Stamping progress has been very slow, owing to the fact that the water in the mine has been somewhat delayed since my last letter, owing to a severe storm, fully 2 ft. of snow having fallen. Masons will finish setting boilers in a few days, and we hope to have pipe connections made, so as to be able to get up steam on or about Oct. 1. Frame of boiler-house and blacksmiths' shop all up, and commence enclosing immediately. Coal is being delivered somewhat faster.

**NEW POTASH.**—Telegram: 875 to 900 tons of quartz milled 725 to 750 ozs. of gold and 100 to 125 tons of sulphides. Stopping in good way. The mine is very prospective of continuing in present good condition. Quartz on mill-rod 125 tons.—N.B.: These figures show that the produce per ton of quartz crushed during the last half of the month has been 1½ oz. per ton.

**NORTH TOLIMA SILVER.**—Aug. 19: The No. 5 or Fortuna vein is somewhat harder in the end as we penetrate the mountain. The lode produces saving work for subsequent treatment, the principal mineral extracted being argentiferous pyrites, which is pyritized and then sent to the No. 3 underground. The adit we are exclusively occupied at present in grading the level by bottom stopping. This will occupy some weeks, and after it is done we will proceed with the cleaning out of the debris to the north-eastern limit of the Spanish workings, the full extent of which we do not at present know. It is in this north-east direction where the best ore appears to have been won in the Confinanza Mine, and we must be prepared to go beneath the Spanish workings on their benches. The vein in the Salto level, and also the vein in the Confinanza level, are both rich in silver, and the quartz impregnated with silver, and with argentiferous and auriferous sulphides yielding good saving mineral for subsequent treatment. In addition to the above savers are engaged cutting timber for buildings and storehouses, and labourers engaged upon roads, water-courses, foundations for edifices and general work. In all there are about 40

FERRETTI.—Manager, Sept. 29: South Mine.—Middle level report. No change of importance has taken place the north and middle level. Middle level report. About 5 tons of stone is being drilled this end as I required them to go to work elsewhere. In the south-east middle level I have put four miners to continue to cross-cut towards the hanging part of the lode to communicate with the stope and rise going up from the No. 2 level south-east. We have only about 6 metres to cross-cut, and 3 or 4 metres to rise from below to make this communication. When this is done we shall be able to work the new lode to much greater advantage than at present. The No. 1 stope, above the north-west middle level, has improved a little in value, and is now worth 3 tons of lead per per fathom. The No. 2 stope has become too poor to work, so I have suspended it. The No. 3 stope, which is a good one, and is now worth 3 tons of lead per slide, continues to yield very good lead, and the part where we are working I estimate to be worth fully 8 tons per fathom. We have also a good lode towards the hanging-wall, where we are taking out some ground to be able to drive the levels on the run of the lode by the side of the hanging-wall; I value it from 3 to 5 tons to the fathom; the ground here, however, is very hard, and consequently slow progress is being made.—North Mine: We have suspended all operations here for the present, as owing to the heavy rains which we have had lately we have a great deal of water, which interferes very much with the sinking of the winze going down from the No. 1 level. The machinery and wire-

**RICHMOND CONSOLIDATED.**—Telegram, Sept. 30: Week's run (one furnace) \$20,000 from 335 tons of ore; refinery, \$21,000.

**RUBY AND DUNDERBERG CONSOLIDATED.**—Sept. 7: Dunderberg: There is no change to report in any part of the mine. There are 12 tributers at present, 6 at Byron. The upraise from the end of the mine has been advanced 4 ft during the week, and connection made with the bottom workings of the west shaft. There are now five tributers at work on this part of the mine at present, who are clearing out the waste material at their own expense preparatory to extracting ore. The ore body in north branch of No. 2 cave continues from 25½ to 4 ft. in width, the quality also is very good, the last lot assaying over 10% of the Fe. The end of No. 1 cave is 10 ft. above the tunnel level; 16 tons ore shipped during the week, and 11 tributers at work.

—Telegram, Sept. 30: 23 tons ore shipped and 26 tons smelted, producing to company \$150.

**TOLIMA.**—Telegram: The amount of profit for the month of August is over \$3000 (500L). There is a marked improvement in the 20 west.

**TOCOPILLA.**—George E. Tilly, July 31: Carmelita Mine: The new lift in Jose's shaft has been retimbered and put in thorough repair and a good double skidroad fixed therein. The plat at the No. 13 level will be completed in the course of a few days. This work has been greatly retarded, as we were unable to haul away the stuff fast enough to keep a full force of men continually at work owing to the scarcity of coal for the engine. The lot seems to be im-

proving as we advance with the pier, it being of a softer nature than in the shaft, and composed of 4 composite granitic schists, which are 10 to 15 ft. thick, and are made up of quartzite, mica-schist, gneiss, and hornblende, all of which are highly crystalline, and some of them containing small quantities of garnet, epidote, and other minerals. The ore is a fine-grained, bluish-grey, massive, and contains much iron pyrites, and also some small branches of copper ore mixed with blende. We hope to begin driving the No. 9 level on the course of this lode on the 8th inst. The lode in No. 11 level, east of Joe's shaft, became poor in the early part of the past month, and continued unproductive for a length of 15 metres; it is now improved, and yielding  $\frac{1}{2}$  ton of 12 per cent. ore per metre, with favourable indications for further improvement. The No. 7 winze sinking below the No. 10 level, has been going on steadily since the 1st inst., and will produce a little more healthy saving work, but insufficient to value. In No. 10 level, east of the shaft, little has been done during the past month in the driftage owing to the time required and difficulty in clearing away the large quantity of stuff accumulated in the level during the month of June. The lode is a little wider than when last reported, and producing  $\frac{1}{2}$  ton of 11 per cent. copper ore per metre. No. 3 winze sinking below the No. 10 level east is being sunk for ventilation. The lode in the bottom yields

### FOREIGN MINES.

**ALAMILLOS.**—Sept. 24: The lode in the 20, driving west of San Martin's shaft, has improved in value to 1½ ton in a fathom. In the 20, driving west of Santa Agueda shaft, the lode has declined to 1 ton per fathom. The lode in the 54, driving west of San Felipe's shaft, is regular and well defined, yielding 1 ton in the fathom. In the 85, driving east of San Enrique's shaft, there are few spots of lead in the lode. The lode in the 130 fathom level, driving east of San Felipe's engine-shaft, produces stones of ore. In the 130 fathom level, driving west of Taylor's engine-shaft, the lode has now improved in appearance. The lode in the 115, driving in the same direction, without lead. In the 30, driving east of San Victor's shaft, the lode is producing a little lead ore, worth ½ ton per fathom. Great progress is being made in sinking San Victor's shaft ½ ton per fathom. The lode in Roda's winze, sinking below the 60, is small and poor. Below the 60. The lode in Roda's winze, sinking below the 60, is small and poor. Below the 60. The lode in Roda's winze, sinking below the 60, is small and poor.

ARIZONA COPPER—The shipments for the six days ended Sept. 6 were 11,145 lbs., or 71 tons 1½ cwt. nearly.

ASIA MINOR—J. W. A. Escherich: Report for August: The value of the stoppings driving south, Level I (Arthur) is 2 to 2½ tons per fathom.—Level II (Hammond): Total stoppings, 40 ft.; value, 2 tons per fm.—Level III (Petrie): Total stoppings, 63½ ft.; value, 2 tons per fathom.—Level IV (Savanna): Total stoppings, 75½ ft.; value, 2 tons per fathom.—Level V (Durfeld): Total stoppings, 41 ft.; value, 1½ to 2 tons per fathom.—Level VI (Durfeld A): Total stoppings, 70 ft.; value, 2 to 2½ tons per fathom. The communication with Level VIII was finished at 31 ft. on Monday, Aug. 14. The hauls on Level VII, with Level VIII, was finished at 31 tons per fathom.—Level VIII (Genoese): Total stoppings, 51 ft.; value 2½ tons per fathom.—General Remarks: Production of ore in August, 321 tons in 24 working days, with picked ore, 13 tons, total, 334 tons.—Dressing-Floors: Production, 157 tons of dressed ore, or 12½ tons per day. Water supply averaged 10 cubic feet. Stock of ore on hand, 31 tons. Transport to Keweenaw, 172 tons. Total quantity transported from Jan. 1 to Aug. 31, 31,200 tons. Two new jiggers and 1 digger were started on Aug. 20.

**HOBBES CREEK.**—The directors have received the following telegram from J. A. Goodwin:—Cleaned up Uncle Sam; return, \$7500; remittance, \$2000.

**CALLAO BIS.**—Mr. Volvelder, Aug. 25: The extension of the shed over the No. 3 shaft is almost completed, and the widening and extension of the shaft is being energetically carried out. Had it not been for the late accident, undoubtedly before this still more gratifying accounts of the development of the lode on your property would have been sent.

**CALIFORNIA GOLD**—Fresno, Aug. 18 (Chicago, U.S. 2). Mill run 500 tons, yield \$1500 (good); smelting 1000 tons, yield 9784 oz. (good).  
**COLORADO** GOLD—M. Macrae, Sept. 13: The last report was dated Aug. 5, when only 3 ft. of water on the floor of 13th level. By Monday (Sept. 15) there was 10 ft. of water on the floor of 13th level. By Tuesday (Sept. 16) the 14th level will be clear, and by Wednesday or Thursday next we expect the mine will be quite clear of water. On Sept. 22 the 14th level drift will be started again, and pushed forward as rapidly as possible.—The Mill: During the fortnight some 260 tons of dirt from the dump have been put through, which has yielded rather more mineral than is usual with this dirt. It is undoubtedly becoming better as we get into the dump, while we have picked out nearly all the cobbling of the last year. We have now 13 sacks of cobbed ore on hand, which will amount to nearly 1000 lbs. of dressed mineral.—Tribute Pitches: On the west workings of the Blaine lode four men are now engaged in drifting west from the bottom of William Rowe's winze, the drift being now in over 40 ft. from the east end of the winze, thus giving them 8 to 7 ft. more to drive to the line. The drift is looking rather better for mineral. On the Silver Ore lode F. McSwenny has started to drive the drift ahead again. The mineral as it entered the drift is not so favorable for large pieces as it was in the Silver Ore lode. The lode Stockton and party are still raising, so as to hole the surface as soon as possible. The drift is looking about the same, carrying from 1 to 3 in. of ore. On Tuesday (Sept. 9) F. McSwenny started to work in his stope at the back of 13th level. The water had slackened down several fathoms of ground which brought down with it about 3 tons of ore. Next week he will start to sort up what ore he has. Williams and Co., on the Brown stull are still running the stull, but two of the partners have given up their interest in the lease.—Shipments: Company's ore, 32 sacks weighing 4 tons 830 lbs.; total, 134 sacks weighing 4 tons 705 lbs. loadings weighing 4 tons 830 lbs.; total, 134 sacks weighing 4 tons 705 lbs. waste ore, 554 sacks.—Ore on Hand: 1000 lbs. lead heads. 6000 lbs. zinc bedder.

- Telegram from Mr. Hamill, Sept. 30: Mine free of water. Have resumed work in the 14th level.

**DENVER GOLD.**—Frank S. Craven, Sept. 17: 700 West, North Vein: Eight tributaries are doing well in this ground, 6 2-5 tons smelting ore sold for \$579.90.

—400 West, North Vein: 52 tons company's mill ore yielded 16½ cts. gold; five contractors and two tributaries are in this ground. —900 West, North Vein: 51 tons company's mill ore yielded 31 2-5 cts. gold; 7 tons tributaries' mill ore yielded 2 tons gold; eight contractors and eight tributaries are in this ground. —800 West. Main Vein: Two tributaries are working below level, with good prospects 8 0 ft. level of shaft. —1275 West. Main Vein: Two tributaries are working on good ore.

1500 West. Main Vein: 65 tons company's mill ore yielded 13 3-4 cts. gold; 4½ tons tributaries' smelting ore sold for \$946.54; ten contractors and eight tributaries are in this lift. Total miners are 23 tributaries and 30 contractors. Total results of five days, ending Sept. 12, were as follows: —Mill Ore: 163 tons yielded \$611.05. —Smelting Ore: 14:33 tons sold for \$1526.44.

**DEVALA MOYAR OLD.**—Manager, Sept. 5: I have nothing new to report. In the lower tunnel, at Salomon's reef, the drainage has been very heavy, and the raise up to connect with the winze has only been driven 4 ft. In the 60 ft level we are raising up on the run of good stone, as it seems much better overhead, and is continuing. The 140 ft. level has been driven 11 ft.; we are driving along the course of the reef. There is a regular channel filled with soft rock all day, with a few loose quartz boulders intermixed, all containing a little gold; as long as the tunnel runs in this it is very probably the carrying vein, and at any moment, and the ground being so soft we can prospect a great deal of country at small expense. Harewood tunnel has been driven 1 ft., and we ought to strike the reef during next month.

DON PEDRO.—Carrain Bryant, Sept. 5: Produce for the month of August: from general work at the strikes amount to 371 oits.; from sample Talho, 2 oits.; total, 400 oits. My previous communications have apprised you that the bulk of the ore at the point of operation—north-west end of Talho Alberto is of low quality, and consequently needs cheap expeditious treatment. The small quantity of the animal which has been found from the strike at present, and lack of the proper appliances, precludes our accomplishing. We have, therefore, to a considerable extent, to depend upon the discovery of some small bunches or lines which, although not rich literally speaking, contain a considerable higher percentage of gold than the general bulk of the ores. During the first half of the month nothing of a rich nature was met with, but by turning our attention another direction, clearing the old shallow workings, a considerable amount came upon a layer of waste ore, 12 to 14 inches in thickness, which gave very good strike work. This material was washed down, since the abandonment of this part of the mine from some points in advance of the present operations, and which we shall endeavour to discover. Hitherto no separation of them has been made, consequently we cannot determine the relative productivity of each point under operation, but I have now commenced a week or ten days work of the general bulk of the ore from the west end of the gallery, and if the result is sufficiently good, we will be enabled to clear the material that will have better pasturage, better facilities for more expeditious transit, and to give our troop a chance of recovering. In the meantime explorations will be pushed on elsewhere, and if we succeed in obtaining fair results, such as we now anticipate from clearing the old shallow level towards the outcrop of No. 8 shoot, we may be able by treating a smaller quantity of stuff to obtain equally good

Gordon's shaft has been completed full size 78 ft. 6 in. below surface, excepting three or four sets to form the collar, at which the below is now engaged. The two small inclined driftages advanced below this 45 ft. each, making about one-third the depth to add to water level. The ground continues firm, tough, and picks sandstone. Before resuming operations at the face we intend laying inclined rails for removing the debris by tram wagons and horse-wheel, which is nearly completed.—Add-*Level*. All have succeeded in getting into the old level of the first, to second crush. All the timber work requires renewal, but several of the first original timbers still remain. The old level timbers will stand a reasonable length of time even in a jacking formation. *Sagranano* and *Sacra* look the best, next some cambosats, while others of this latter class are well rotted out. An elevated tramway has been made across the main road for dumping debris into the ravine, and continued to present points

**PORUNA.**—Sept. 24: Canada Incoima Mine: In the 90, driving west of San Pedro's shaft, the lode has declined in value to  $\frac{3}{4}$  ton per fathom, and the ground has become harder. In the 120, driving east of O'Neal's engine-shaft, there are occasional spots of ore, but not enough to attach value to. A good lode has been opened up in the 110, driving east of Lowndes' shaft, during the past fortnight; it is now valued at  $\frac{3}{4}$  ton per fathom. The lode in the 100, driving in the same direction, although small yields good lumps of ore; worth  $\frac{1}{4}$  ton per fathom. Callis winze is being sunk below the 80 in a moderately good lode, yielding 1 ton of ore per fathom; good progress is being made. —Los Baldes: In the 175, driving east of Taylor's engine-shaft, water is issuing strongly from the lode, but it is not doubted that it will be worth one or two, when driving on its course will commence. The lode in the 160, driving in the same direction, is gradually improving as the level advances, and is yielding fine stones of ore, valued at 1 ton per fathom. In the 145, driving east of Taylor's engine-shaft, the lode maintains its size, but contains more clay and calcareous spar, its present worth being  $\frac{1}{4}$  ton per fathom. The lode in the 130, driving east of Taylor's engine-shaft, is small and open, but does not contain enough to be valued. —San Antonio: In the 145, driving east of Taylor's engine-shaft, the lode is being sunk on a very productive lode; the lode in the 145, yielding 2 tons per fathom, is good. —San Antonio: In the 130, driving east of Henty's engine-shaft, it is found to be composed of quartz with lead ore, valued at  $\frac{3}{4}$  ton per fathom. The 30, driving west of Henty's engine-shaft, is on a lode running counter from the main lode, and is of a very kindly appearance, producing 1 ton per fathom. The lode in the 30, driving east of El Tesoro engine-shaft, continues quite regular, but does not contain as much sufficient to value. In the 30, driving west of El Tesoro engine-shaft, there is a large, yielding 1 ton per fathom, and the ground moderately soft for driving through. The lode in Matto's winze, sinking below the 55, looks somewhat better than it did; it will be down this month, its present value being  $\frac{1}{4}$  ton per fathom.

**GOLD COAST.**—Mr. Gowan, Aug. 17: There will not be any difficulty with the machinery after the overhaul, now all but finished, be completed. The repair of damages caused by floods has gone on satisfactorily, and is just about finished. All the miners are working on No. 3 lode, and a considerable quantity of ore has been stripped and exposed ready for shooting down as soon as the machinery starts.

HOOPER HILL. Sept. 20. We have finished cutting down the Broil's shaft to the 13, and are now doing some cutting down required in the stop below the 132. The vein in the north drift from the Gallimore shaft at the 230 has improved, and is looking well. The vein in the south drift is small, but fairly good. The dip of the Broil's shot of ore is carrying it to the north of the bottom of the north ore shaft, so that the best ore is to be expected in the north drift. -How far the vein in the No. 1 stop continues of fair grade, and the ore bed is increasing in size. In the south drift the ore is of fair grade to the north-east, in which direction it proved to be poor. We are now following it to the west, and are breaking some fair ore. In the prospecting work begun at the south-west of the No. 1 stops we are finding a little ore, but



## Mining Correspondence.

level will yield 9 tons of arsenical mundie per fathom. We have nothing new to report in any other part of the mine.

**GAWTON.**—*Moses Gawton, Oct. 2.* Since the last general meeting of the shareholders in 1882, the following has been suggested by Capt. Hohen in his report, dated April 15, 1883,—sunk a trial mine in the bottom of the 117, about 150 fms. east of the engine-shaft, and by the sinking of this mine have proved that the large lode of arsenical mundie driven through in the 117 has maintained its level and value for at least 12 fms. below the mid-level; also driven the same trial mine for 100 fms. east of the engine-shaft, and at a depth of 175 fms. from the surface, and has proved that the large lode of arsenical mundie per fathom, when a second cross-course is intersected, which shifted the lode about 2 fms. to the south, and for the last 20 fms. of drive, although the lode has been of a most promising character, it has not yielded copper ore.



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## The Mining Market: Prices of Metals, Ores, &amp;c.

METAL MARKET—LONDON, OCT. 3, 1884.

IRON.	£ s. d.	£ s. d.	TIN.	£ s. d.	£ s. d.
Ing., 600, f.o.b., Clyde...	2 1 3/4	—	English, ingot, f.o.b. ...	81 10 0	82 0 0
Scotch, all No. 1 ...	2 3 1/2	2 4	bars ...	82 10 0	83 0 0
Bar Welsh, f.o.b. Wales ...	5 0 0	—	refined ...	83 10 0	84 0 0
in London ...	5 10 0	—	Australian ...	78 15 0	79 5 0
Stafford ...	5 0 0	—	Banco ...	nom.	—
in Tyne or Tees ...	5 0 0	—	Strait ...	78 7 6	78 10 0
Swedish, London ...	5 0 0	9 10 0	COPPER.		
Rail, Welsh, at works ...	5 0 0	—	Tough cake and ingot ...	58 0 0	59 0 0
Sheets, in London ...	5 3 1/2	7 10 0	Best selected ...	59 0 0	60 0 0
Plate, ship, in London ...	7 10 0	8 0 0	Sheets and sheathing ...	63 0 0	67 0 0
Hoops, Staff ...	6 7 6	—	Flat Bottoms ...	68 0 0	70 0 0
Wall rods, Staff, in Lon ...	6 7 6	—	Wallaroo ...	nom.	—
STEEL.			Burra, or P.O.C. ...	60 0 0	—
English spring ...	12 0 0	13 0 0	Other brands ...	58 10 0	60 0 0
cast ...	12 0 0	13 0 0	Chill bars, g.o.b. ...	54 0 0	—
Swedish, keg ...	13 0 0	14 0 0	QUICKSILVER.		
fact, in Lon ...	13 10 0	14 10 0	Flasks, 75 lbs. waf. ...	5 12 0	—
Italy at works ...	12 6 0	—	PHOSPHOR BRONZE.		
Light, at works ...	12 6 0	12 6 0	Alloys ...	£107 0 0	—
LEAD.			V. and II. ...	115 0 0	—
English pig, common ...	10 17 6	11 0 0	VI. and VII. ...	127 0 0	—
L.B. ...	11 0 0	11 2 6	XI. ...	105 0 0	—
W.B. ...	11 2 6	11 5 0	Duro A, Duro B ...	100 0 0	—
sheet and bar ...	11 12 6	11 15 0	BRASS.		
red ...	13 5 0	14 0 0	Wire ...	5 1/2 d.	—
white ...	14 10 0	15 0 0	Tubes ...	8 1/2 d.	—
patent shot ...	14 0 0	—	Sheets ...	8 3/4 d.	—
Spanish ...	10 12 6	10 15 0	Yel. met. sheath. & sheets ...	5 1/2 d.	—
NICKEL.			TIN-PLATES.		
100 per cent. ...	—	—	Charcoal, 1st quality ...	1 10 0	2 0 0
Ore 10 per cent. per ton ...	—	—	2nd quality ...	0 18 0	0 0 0
Belgian ordinary brand ...	10 0 0	—	Coke, 1st quality ...	0 18 0	0 18 0
special brands ...	14 15 0	—	2nd quality ...	0 15 0	0 16 0
English Swansea ...	15 5 0	—	Black ...	per ton 15 10 0	—
Sheet ...	17 10 0	17 15 0	Canada, Staff. or Glia ...	12 0 0	—

REMARKS.—During the past week our markets have been rather unsteady, and prices have fluctuated to some extent, particularly for tin. This has been caused not so much from any unfavourable feature in the metal market itself, but from the unsatisfactory influence produced by the advances received from other markets. A sort of semi-panic seems to be threatening, and the pinch is evidently most keenly felt by many of the weak holders, many of whom being forced to effect sales and cut further losses and risks. In other branches of commerce compromises are reported, combined with a general stagnation in trade, and that bears such a large influence upon our markets that holders of metals are actually making further sacrifices upon the already very low prices. As regards regular business there is evidence to show that a very fair number of transactions have been carried through. Large deliveries are reported in copper, the heaviest on record have been effected during the past month, but still the whole trade is bad, owing to the very unprofitable prices that are being realised. Many consumers are fully alive to the advantages to be derived from purchasing at current rates, and whilst we can scarcely look for any further material reduction in prices, unless a commercial crisis ensues, yet, at the same time, should prices be further reduced there is every reason to anticipate that the demand would be proportionately augmented.

The low prices have so far caused an enormous development in the demand, and further reduced rates would, probably, tend to increased business. Present prices do not interfere with trade, they are much too low for that; nevertheless, it stands to reason that the lower prices descend the more inducement is afforded consumers to increase their purchases, the greater facilities are given for the promotion and encouragement of enterprise, and increased inducement is offered to holders to enlarge their stocks. A panic might drive prices lower, but it would be only temporary. Suppliers cannot go on producing at lower rates. Present prices in many instances only result in losses, and further reduced rates would only lead to the closing of more works, throwing more of the labouring classes out of employment, causing further reduced wages, and thus stimulating strikes throughout the kingdom, and causing general distress in all commercial circles. It would check supplies, whilst stocks would continue to be more and more reduced, because, as we have already said, consumers and shippers would continue to buy freely with reduced rates merely to increase their own private stocks, if not to meet their current requirements, and the after result would be (that is to say, after the crisis, if it occurred, had past) a sudden rebound in prices, and that those who had been wavering between the two opinions would find themselves in the lurch, and prices considerably above the present low and unprofitable figures.

Buyers cannot be too deeply impressed with the advisability of effecting purchases at the present time, now is their season when everything is in their favour and ere it is too late, before the storms and frosts of winter set in, and the cost of transit becomes more expensive, should they fully satisfy their requirements and replenish their stocks. Prices being cheap, far less capital than in an ordinary way is required, and finance is very easy. The wants of the trade are rapidly increasing, and, therefore, it is most improbable that they would have to cling to the stocks for any length of time before they found a ready and profitable market. There is nothing in our own markets to check business; but everything to promote it, and whilst it is possible that further reduced rates may have to be accepted for a while until the general commercial atmosphere becomes less clouded, and political affairs, both at home and abroad, brighten up, yet it can be only for a time, and for those who are able to stand out firmly, and cling to stocks bought at present rates, and increase their holdings as the markets further recede, if they should do so, have before them probably a bright and prosperous future.

COPPER.—This market has remained fairly steady, and holders have been tolerably firm in their quotations, and on Wednesday demanded slightly higher rates, owing to light charters from Chili for the last half of September, and which were advised as only 900 tons. Advances from the Lake Superior copper mines show that since Jan. 1 last the production of mineral has been 19,334 tons, against 16,441 tons for the first half of 1883, and last year the Lake mines produced about 60,000,000 lbs., and it is said that there is good reason to expect that this quantity will be increased to 70,000,000 lbs. this year, seeing the improved communications opened up by the Canadian Pacific Railway. As regards the Australian production, a recent report shows that in 1883 the quantity raised in New South Wales was 58 tons, and in the following year 30 tons. Since then, with the exception of two or three years, there has been a steady increase, until in 1883 the quantity reached some 400 tons.

The statistics that were published on Sept. 30 were more favourable than they have been for many years past, and bear the striking characteristics of the heaviest deliveries on record, the lightest stocks for a great number of years past, and nearly the lowest prices at which copper has ever been known. The deliveries last month were—12,456 tons, against 6761 tons in the previous month; 9323 tons in September, 1883, and 9145 tons in September, 1882. Whilst, however, the deliveries were the largest ever known, the supplies also bear the same characteristic, being 10,723 tons. The reduction in the stocks for the month was 1733 tons, the total stock on Sept. 30 amounting to 40,823 tons, against 49,595 tons at the end of September last year, when the price of Chili bars was 9s. per ton higher than it is now, and 48,945 tons for the similar period of 1882, when the price was 17s. per ton higher than what it is at the present time. The total charters from Chili for the 12 months ending September 30 were 42,200 tons.

IRON.—This market remains steady, but there is not much business doing, and there is no new feature worthy of comment. Buying both for the regular wants of the trade and also for shipping is extremely limited; and although a few orders have recently been

given out which has given more activity to some of the mills, particularly the works that turn out sheets, yet most of the manufacturers in all parts of the country are very badly off for work, and cannot find enough to keep their works in anything like regular working time. Whilst there is the great difficulty of obtaining orders to contend against, yet at the same time this is not apparently the chief difficulty, for the question of price is one that is assuming even still greater importance. It would not be so bad if a small business even could be done with a limited profit, as it is now when there is no margin for remuneration, and even positive losses have to be submitted to. The result is that manufacturers cannot continue to pay their men the same rates of wages as heretofore, and have repeatedly to insist upon further reductions, against which the men more often than not strike, and intensify the distress amongst themselves, and then at last return to their work at the reduced rates of wages, and often in the short space of time of but a few weeks only, to find that prices have been further reduced, and that still lower rates of wages have to be accepted. Fortunately, indeed, were those manufacturers who secured a fair number of orders during the late little spurt in the Staffordshire districts; but it is evident that notwithstanding some sellers in consequence slightly advanced their prices, buyers cannot be found to give out orders at increased rates.

The statistics for the month of September show that the public stock in Glasgow last month was reduced by 2295 tons, and in Middlesbrough by 1245 tons. The Glasgow warrant market this week has been fairly steady, and on Monday a good business was done between 41s. 7 1/2d. and 41s. 9d., while on Tuesday numerous transactions were recorded between 41s. 7d. and 41s. 7 1/2d. On Wednesday, the market was steady, and there was a fair business at 41s. 8d. to 41s. 8 1/2d., and yesterday there was scarcely any variation, the quotation being 41s. 7 1/2d. to 41s. 8 1/2d., whilst the closing figure this afternoon is 41s. 8 1/2d. per ton. The shipments last week were 9242 tons, against 13,238 tons for the same week last year, being a decrease of 3996 tons, and which makes the total shipments for the whole of this year 421,176 tons, against 493,614 tons for the same time of last year, and 485,149 tons for the similar period of 1882. There are still 94 furnaces in blast, and the public stock has been further reduced by 585 tons, and now amounts to 383,597 tons, against 584,182 tons last week.

The imports of Middlesbrough pig-iron into Grangemouth last week were 5995 tons, against 4815 tons for the same week of last year, being an increase of 1180 tons, and which makes a total decrease for the whole of this year, compared with last, of 4327 tons. The Cleveland market is reported steady, and prices firm. Business, however, keeps small, and chiefly for prompt delivery, forward sales being especially limited. Second-hand parcels of No. 3 are quoted at 38s. 6d. to 38s. 7 1/2d., makers' prices still being 37s. There is a slack demand for forge, which is quoted at about 33s. 6d. to 34s. The shipments last month were about 15,000 tons in excess of those for August. The total exports of pigs from the Tees being 99,751 tons, of which quantity 34,843 tons were dispatched coastwise, mostly to Scotland, and 55,108 tons foreign, the largest customer as usual being Germany, which took 21,036 tons. The shipments last week were 19,600 tons, and the nominal price for warrants is 36s. to 36s. 3d.

In manufactured there is no improvement either in demand or price, and bars are quoted at 57s. 2s. 6d.; angles at 47s. 15s.; and ship-plates at 57s. per ton. Although there is not much business doing at Wolverhampton, the market there is reported firm, several consumers deferring their order until after the Quarterly Meeting next week. The quotation of Staffordshire plate mine qualities is 42s. 6d. Derbyshire, 42s.; good Northampton, 41s. 6d.; and Staffordshire cylinder sorts from 37s. 6d. to 40s. Galvanised corrugated sheets are quoted rather higher, and 7 1/2d. to 7 1/2d. 12s. 6d. is asked for plain doubles. At Birmingham there is no change to report, and buyers, in some instances, are withholding their orders for reduced prices, hoping that sellers will be easier in their quotations next week after the Quarterly Meeting. Sellers, however, appear to be more sanguine of a stiffer market; nevertheless, the general opinion is that no change of any importance will be effected at the coming Quarterly Meeting.

TIN.—During the past week there has been a semi-panic in this metal, and prices have undergone considerable fluctuations. Holders for a time seemed to lose all control of the market, and transactions were recorded down to 78 1/2d. per ton, which figure was touched yesterday morning; but afterwards some recovery took place, although the total loss for the whole week is very serious. It is, however, a matter of congratulation that the falling prices are not to be attributed to any unfavourable features in this particular market, as to unsatisfactory influences produced by general depression, and therefore, need not be considered as chiefly by the reported financial difficulties in other branches of commerce, together with the general trade depression. True the statistics published for last month are not very favourable, showing an increase in the total visible stock to 13,527 tons from 13,238 tons on Aug. 31; but this increase—only 291 tons—is not sufficient to have caused the enormous fall in prices.

The deliveries last month were not so large as they generally have been of late, amounting to only 1539 tons; nevertheless, this quantity is fully up to the average of previous September, and therefore, need not be considered as altogether unsatisfactory. The supplies from Straits to London last month were 975 tons, from Australia to London 900 tons; from London and Holland to America 355 tons, from Straits to America 325 tons, and from Australia to America 50 tons. The stock of Banca in Trading Company's hands and afloat is said to be 2536 tons. Many of the weaker holders have been selling freely and the principal operators have let the market take its course, hence the heavy reduction of prices during the greater part of the week, but last night there was a change for the better, tin was more sought after, particularly for forward prompts. Prices have become slightly stiffer, and a smart rebound, therefore, does not seem at all improbable.

SPELTER is firm, at 14 1/2d. for ordinary and 14 1/2d. for special brands.

LEAD is steady, and we quote 10 1/2d. to 10 1/2d. for Spanish and 10 1/2d. to 11 1/2d. for English pigs.

STEEL.—A moderate business continues to be transacted at unaltered prices.

TIN-PLATES.—On the whole this market is quiet and prices for the most part are easy; nevertheless a few makers who have taken a fair number of orders keep firm in their quotations.

QUICKSILVER has been quiet all the past week, without change in the position. The production in California shows a further sensible decrease.

THE MINING SHARE MARKET has been rather more depressed than usual this week, owing to the fall in the standards for tin ore, and very little business has been transacted either in tin, copper, or lead shares. Thus quotations are merely nominal, and not always to be relied upon. A few very low priced gold shares such as Hoover, Balkis, and others appear to have been largely dealt in.

TIN.—On Tuesday the smelters, as it was feared, reduced the standard for ore 2s. per ton, and shares in tin mines have been not only weaker, but less dealt in. Cook's Kitchen are now quoted 12 to 13; Carn Brea, 1 1/2 to 1 1/2; Dolcoath are weaker, at 7 1/2 to 7 3/4; East Pool, 3 1/2 to 4 1/2; East Blue Hills, 3-16ths to 5-16ths; Killifreth, 3 1/2 to 4 1/2; New Kitty, 1 1/2 to 1 1/2; South Condorow, 3 1/2 to 4; South France, 6 1/2 to 7; Tincroft, 7 1/2 to 8; Trevaunance, 2 1/2 to 2 1/2; West Basset, 2 1/2 to 2 1/2; West Godolphin, 1 1/2 to 1 1/2; West Kittys have declined to 9 1/2 to 10 1/2; Wheal Agar, 1 1/2 to 1 1/2; Wheal Basset, 2 1/2 to 2 1/2; Wheal Grenville, 6 to 6 1/2; Wheal Kitty (St. Agnes), 3 1/2 to 4; Wheal Uny, 3 1/2 to 4; West Frances, 5 1/2 to 6 1/2; at the meeting the accounts showed a profit on four months' working of 1957, and with everything charged up close there was a balance in favour of 5117. Captain J. Thomas, the manager of this mine as well as of Dolcoath, stated to the meeting that they were discovering four times as much tin as they were taking away, and he did not hesitate to say that they were opening up one of the finest courses of tin in the county of Cornwall. The produce of the lode for the past four months was 120 lbs. of tin to the ton, the highest produce of any mine in the county. Mounts Bay, 3 1/2 to 4; New Kitty, 1 1/2 to 1 1/2; Polberron, 1 1/2 to 2 1/2; West Polberron, 3 1/2 to 4; New Kitty, 3 1/2 to 4; West Phoenix, 3-16ths to 5-16ths; Trevaunance, 2 1/2 to 3; South Croft, 2 1/2 to 3.

COPPER is steady, and the statistics of the month are favourable for a rise. In shares very little has been done or is doing, and quotations are mostly nominal. Bedford United, 1 1/2 to 1 1/2; Devon Great Consols, 2 1/2 to 2 1/2; Devon Friendship, 2s. to 4s.; Gunnislake (Clitters), 3 1/2 to 4; Marke Valley, 4 to 5; Mellanear, 3 to 4. Prince of Wales, 7s. 6d. to 10s.; at the meeting, particulars of which will be found in another column, the accounts showed a loss on four months' working of 8777, and a balance of liabilities over assets of 14817 19s. 7d. A call of 2s. per share was made. The agent stated that if the late discovery in the 102 east continued as it now was—and it is rather improving than otherwise—according not only to his, but to independent testimony, he could after a month pay the costs of the mine from returns, and the meeting was altogether very satisfactory and unanimous. As an instance of how the market is sometimes worked upon to the injury not only to individuals, but to shareholders collectively, the Chairman stated that on Friday last a nozzle of the engine broke, and on a letter to this effect reaching the office of the company, and becoming known, though it was of no importance whatever, a few shares were forced on the market, and sold at 4s. per share. In the newspapers of the next day a fall of 4s. per share was announced in Prince of Wales. This, for a trifling accident that did no damage whatever to the mine, and was repaired at a cost to the company of less than 27s. was made the means of depreciating the mine to the extent of at least 20000. West Crebors, 2s. to 2s. 6d.; the lode in the bottom level is 24 ft. wide, of quartz, capel, mundio, and a little copper ore, and the agent thinks it looks like further improvement. The New Caradon, 3 1/2 to 4; the lode lately cut here is looking better. New West Caradon, 3 1/2 to 3-16ths; the lode lately cut in the back of the 17 fm. level is now 1 ft. wide, and worth 1 ton of ore per fathom. Wheal Crebors, 1 to 1 1/2; New Cook's Kitchen, 1 to 1 1/2; South Caradon, 3 1/2 to 4; West Caradon, 1-16th to 1/2.

LEAD Mines are still quiet and very little change in shares. Vans

are quoted 3 to 4; Capt. Hodge, of Wheal Grenville, has inspected and reported upon this mine, and he thinks profits and dividends may be made from the old mine, while the western discovery may be opened up with the capital provided. Great Lacey, 8 1/2 to 9 1/2; Roman Gravel, 3 1/2 to 3 1/2; Leadhills, 1 1/2 to 1 1/2; Old Shepherds, 3 1/2 to 4; New Langford, 3 1/2 to 4; East Wheal Rose, 3 1/2 to 4; Wheal Rose, 1 1/2 to 1 1/2.

FOREIGN MINES.—There has been somewhat more business doing in mines of this class, although no material improvement in prices can be noted, and the quotation of seven mines "x. d." in the Colonial and Foreign Mines section of the Stock Exchange Official List looks something like a return to normal prosperity. The payment of half-a-dozen mining dividends each week would suffice to keep both capitalists and speculators in good humour, and ensure the energetic development of all mines worth working. Akankos are quoted 5-16ths to 7-16ths; Alamillos, 1 1/2 to 1 1/2 ex div.; Almada and Tinto, 1-16th to 3-16ths; Anglo-African Diamond, 1 1/2 to 2 1/2; Asia Minor, 1 1/2 to 2 1/2; Australian, 1 1/2 to 2. Balkis have been largely dealt in, and leave off 3s. to 4s.; Birdseye, 3 to 4; a telegram from the superintendent says:—We have cleaned up at Uelco Sam; the return is \$7500; remittance, \$2000. This is the result of the drifting process, and is considered satisfactory. Bratsberg, 1 1/2 to 1 1/2; Callao Bis, 3 to 4; Cape Copper, 43 to 44 ex div.; Chile, 1-16th to 3-16ths; the remittance for August was 1803 ozs. for 29 days from 2610 tons of quartz with 60 stamps—the remittance for August last year was 3682 ozs. for 27 days, with 40 stamps. Chontales, 3 to 4; Colombian Hydraulic, 7-16ths to 9-16ths; Colorado United, 2 1/2 to 2 1/2 x.d.; Devalar Moya, 3-16ths to 5-16ths; Fortuna, 2 1/2 to 3 1/2 x.d.; Frontino and Bolivia, 3 to 4; during July 2647 tons (of 20 cwt.) from general mines produced (average 12 1/2 dwts. per ton) 1682 ozs.; gold bought, 74 ozs.—1756 ozs. Estimated value of gold, including exchange, 49987. 10s. The cost at the mines at Medellin, and in London, 55337. 6s. 11d. Monthly allowance for freight, commission on gold sales and sundry fluctuating outlays not immediately ascertainable, estimated at 25000; paid for gold bought of tributaries, 1507. 6s. 10d.—57337. 13s. 9d., leaving estimated loss, 7357. 3s. 9d. Last month's missing reports have arrived; this month's are again missing. At Antioquia (Frontino) the mineral and attle crushed during July produced 87 ozs. gold, the estimated value of which, including exchange, was 2477. 14s. 10d.; cost at the mines at Medellin and in London, 2967. 18s. 2d.; leaving estimated loss, 497. 3s. 4d., in addition to 1297. 1s. 10d. spent on capital account.

General Mining, 5 1/2 to 6 1/2; Hoover Hill, 3-16ths to 5-16ths. Kapaanga, 3 to 3-16ths; the directors are hoping for a favourable telegram next week. La Plata, 3-16ths to 5-16ths; the telegram shows the working results for September to be—ore received, 6000 tons; La Plata Mine, 1000 tons; ore smelted, 5400 tons; bullion produced, 550 tons; silver produced, 100,000 ozs. Linares, 2 1/2 to 3 1/2 ex div.; Lisbon Berlyn, 3 to 4; Mason and Barry, 9 1/2 to 9 1/2; Montana, 1 1/2 to 1 1/2; Mysore Gold, 3 to 4; New Callao, 2s. to 4s.; New Emma, 3 to 4; New Potosi, 3-16ths to 5-16ths; Organos, 7-16ths to 9-16ths; Orita, 1 to 1 1/2; Oscar, 3 to 4; Panulillo, 3 1/2 to 3 1/2; Quebrada Railway, 3 1/2 to 4; Richmond, 3 1/2 to 3 1/2; Rio Tinto, 15 to 15 1/2; ditto second mortgage bonds, 9 1/2 to 9 1/2; Ruby and Dunderberg, 3 to 4; St. John del Rey, 60 to 70; Schwab's Gully, 6 to 6 1/2; Tharsis, 5 1/2 to 6 1/2; Tolima, A, 6 1/2 to 6 1/2; United Mexican, 3 1/2 to 3 1/2; the usual weekly telegram states that the excess of returns over outlay in the mine of San Cayetano de la Ovejera for the week ending Sept. 27, is \$8200, and on El Diamante \$300. I intend remitting to the directors by next mail \$15,000. Western Andes, 4 1/2 to 5.

THE MARKET FOR MINE SHARES on the Stock Exchange remains without material improvement, as regards either amount of business or current quotations; but there is a decidedly more cheerful feeling, and the opinion is very general that we are on the eve of a great advance, the result being that several new companies have issued, or are preparing to issue, their prospectuses. In connection with the suspension of the Egyptian Sinking Fund, a Reuter's telegram just received from Cairo states that the International Tribunals will open to-morrow, after the Curban Bairam holidays, when the Caisse of the Public Debt will institute legal proceedings, in consequence of the suspension of the Sinking Fund, against the Egyptian Government, and, personally, against the provincial governors, the directors of railways, and customs. The Caisse of the Public Debt will attach the property of Ali Riza Pacha, a rich landowner and native director of railways. It was remarked in this place last week that very few men of business cared about the Franchise and anti-pegage agitation now going on, and it seems that not only is this view correct, but that—at least so far as the Franchise Bill is concerned—the indifference is not confined to men of business, for Sir Thomas Gladstone, the Prime Minister's brother, writing to a correspondent, says:—"I cannot suppose that the opinion of a stranger to you can have any weight; but as you ask me I beg to state that until the recent agitation the unfranchised rural classes in my part of Scotland knew nothing and cared as little for the proposed enfranchisement, though the unscrupulous means used have succeeded in awakening some of them to a want they were not till now conscious of. The really anxious are those who wish to obtain their votes." Assuming then that the whole agitation is a mere "storm in a teacup" for electioneering, it may be hoped that as soon as the Autumn Session has been held, and this fact brought to light, there will be a general revival in business. The market, however, closes very dull.

Our usual telegram from Cornwall this evening says:—"During the past week the Cornish Mine Share Market has been quiet, with few transactions following the London market. The Cornish smelters on Tuesday reduced the tin standards 2s. per ton, standards now being—common 71s., superior common 73s., and refined 75s. per cwt. It is satisfactory that the leading shares have not been much affected, and sellers are rather shy in parting with their holding. At Redruth yesterday 828 tons of copper realised 28567, the standard remaining unaltered. At West Wheal Frances meeting yesterday the accounts showed a profit of 1957, on four months' working, and a total credit balance of 5117. Capt. Josiah Thomas remarked that they had four times as much tin as they had taken away, and they were opening one of the richest bunches of tin in Cornwall. Capt. James Bennetts has been appointed purser and manager of St. Just United at 10 guineas a month.

The Norway Phosphate Company, with a capital of 100,0000, in shares of 100. each, has been formed for the purpose of purchasing for 60,0000. (of which 15,0000. is taken in cash and the remainder in fully-paid shares), and working certain mining rights of phosphate of lime on the Haukedal property, Norway. The prospectus, which will be found in another column, states that the property is situated between Stadthelle and Kragero, on the south-east coast of Norway, and adjoining the famous Oedergerden Phosphate Mines, which are working at a great profit. Of the 4500 shares allotted to the vendors, 4000 are to receive a dividend until 10 per cent. per annum has been paid on the ordinary shares, any balance of profit available and appropriated for dividend after that payment will be applied to the payment of a similar dividend on the 4000 vendor's shares, and any further excess will be divided without distinction amongst the holders. Samples of the phosphates, and the result of Dr. Voelcker's analysis, have been submitted to one of the leading French phosphate brokers in London, who stated that for this high-class mineral there is practically an unlimited market, and the value of the samples were respectively 6s. per ton and 7 1/2d. per ton. The samples submitted to Dr. Voelcker were reported—No. 1, 80.25 per cent.; No. 2, 89.13 per cent.; No. 3, 89.96 per cent. of tribasic phosphate of lime; and he added that they are very high class, and remarkably free from alumina and carbonate of lime. Though hard they are at the same time brittle, and are reduced to a powder much more readily than many of the tougher varieties of phosphates, such as Spanish. The directors are informed that from the adjoining French company's mine, the Oedergerden, the exports for the year 1882 amounted to 16,000 tons, a large proportion of which averaged 90 per cent., and yielded returns of about 110,0000. The property being within two miles of the coast the cost of carriage would be small, and the mineral could be transported on a wire tramway, as at the adjoining mine, at a mere nominal cost. It is estimated that the total cost of mining and freight to England will be about 2s. per ton, which will leave a profit of from 2s. 10s. to 3s. a ton, according to fluctuations of the markets. The company has a thoroughly respectable and competent board of directors, so that there is every guarantee that the enterprise will be carried on with energy and judgment.

The Barry Dock and Railways Company, incorporated by Act of Parliament, session 1884, with an authorised share capital of 1,050,0000, are inviting subscriptions for 100,0000, in shares of 100. each. The enterprise was fully referred to in the Mining Journal of Aug. 9. The object of the company is the construction of a dock at Barry Island, seven miles from Cardiff, and within the Port of Cardiff, and the construction of railways of about 26 miles in length



from the dock to the Rhondda Valley, with access by junctions with existing and proposed railways to all the other great mineral producing districts of the South Wales coal field. The dock will be constructed on a most favourable site in the estuary between the mainland and the island. The area of the dock will be 40 acres, with a basin of 8½ acres, and a timber pond of 15 acres. The depth of water available over the sill of the dock will be greater than that available at the other docks within the Port of Cardiff. The dock will be fitted with the best appliances, and adapted for the accommodation of the largest steamers now afloat. In three minutes after leaving the dock the vessels will be clear at sea, and in deep water, and free of the difficulties and dangers attendant upon the navigation of the narrow and crowded entrance to the Cardiff and Penarth Docks. The output of coal in the Rhondda Valley has increased from 2,400,000 tons in 1873, to 7,000,000 tons in 1883, and the shipments were 3,500,000 tons in 1875, and had increased to 8,750,000 in 1883, while the first six months of the present year show that the increase is still being maintained. Practically, the whole of the traffic from the Rhondda Valley has been carried to the sea for shipment by means of the Taff Vale Railway, and the large dividends of that company have been earned chiefly by the carriage of this traffic, that company's dividends having been for some years past from 16 to 11 per cent., and by the issue of new shares at par to the shareholders the dividend has been largely increased; and the Rhymney Railway Company, although it has no access to the Rhondda Valley, pays a dividend of 10 to 11 per cent. There are, therefore, good grounds for justifying the expectation that hand-dividends will be earned on the railways as well as on the dock. There is a population in the Rhondda Valley of from 80,000 to 100,000 inhabitants, to whom the additional route to the seaboard afforded by the proposed dock will be of great advantage, and this branch of traffic will form a considerable item in the receipts of the company. The undertaking is, in fact, the natural outcome of the enormous leases which shipowners and colliery proprietors have been compelled to submit to in conducting their business at the port of Cardiff with the present railway and dock facilities, which are altogether inadequate for the accommodation of the enormous traffic of the district. The leaseholders of the district have almost unanimously supported the scheme, and, in fact, some of the principal promoters are the creators and possessors of a very large proportion of the enormous traffic which is now being poured into the port of Cardiff; and they are themselves dealing with traffic the one half of which is more than sufficient to fill the Barry Dock.

The United Mining and Smelting Company of Canada, which it is proposed to form under the provisional agreement between the Canadian Copper and Sulphur Company and the Huntington Copper and Sulphur Company, will be constituted with a capital of 177,250 £, divided into 75,000 7 per cent. preference shares of 1 £ each, and 102,250 ordinary shares of 1 £ each. The Canadian Copper and Sulphur Company is to sell all its property, except cash, to the new company, in consideration of 28,000 £ cash, and 39,340 ordinary shares. The Huntington Copper and Sulphur Company is to sell to the new company all its property, except cash, in consideration of 60,000 £ cash and 47,910 ordinary shares, and a bonus of one fully-paid ordinary share is to be given to the subscriber of each five preference shares absorbing 15,000 ordinary shares. The 75,000 preference shares are to be sold for cash, which will suffice for the proposed payments to the two companies, and leave for working capital and the erection of sulphuric acid works 41,000 £. The time fixed for the compulsory sale of this company's properties has been deferred until an early date in November, of this year, and the shareholders and debenture-holders distinctly to understand that unless the scheme which is now proposed receives their substantial financial support the properties must inevitably be sacrificed.

Devon Great Consols, 2½ to 3½; the monthly sampling of copper ore is 800 tons. The eastern shaft at the Wheal Maria part of the mine has been sunk 2½ fms.; where the lode is opening out from 4 ft. to 5 ft. wide, and yielding good quality of copper and arsenical ores, and an important discovery is looked for at this part of the company's property, near to which the discoveries of ore were made several years ago, which caused shares to rise from about 1 £ to between 700 £ and 800 £ per share. The development in sinking this eastern shaft is being pushed forward with the greatest expedition. Devon Great United, ½ to ¾; the lode in the 120 west maintains its value, as reported last week, and is worth 2 tons per fathom, and likely to improve.

Drake Walls, ½ to ¾; good progress is now being made in clearing the shaft below the 92, and in about a week or ten days it is hoped the shaft will be clear to the 102.

Home Mines Trust, 1 3-16ths to 1 5-16ths, and a very firm market is reported, the feeling appearing to be pretty general that several important sales have yet to be covered, and as Monday is buying-day a further important rise is anticipated. There is general expectation expressed as to the forthcoming annual report and balance-sheet, but in well-informed circles considerable buying has been going on in anticipation of the coming dividend.

Kit Hill Great Consols, ½ to ¾; the great tunnel level has been driven 15 ft., where the granite is of a soft nature, and congenial for the production of mineral.

South Devon United, ½ to ¾; satisfactory progress is being made at the 120, west of shaft, where the lode is worth 14 £ per fathom. In driving the 120, west of Martin's shaft, the lode is full 5 ft. wide, and worth 14 £ per fathom. The lode in No. 1 stop is being worked by 10 men, and is worth 12 £ per fathom, and No. 2 stop is worth 10 £ per fathom.

Ruby and Dunderberg, ½ to ¾; the weekly report advises that connection between the Tunnel and the west shaft of the Lord Byron Mine had at last been made, and that some tributaries had set to work here at once on some ore already in sight. It is hoped this new find will enable the management to considerably increase the output shortly.

In Lead Mine Shares there has been no material change, but prices have suffered no further decline, and the general prospects are regarded as more hopeful. Satisfactory work appears to be now going on in Durham; the report of the statutory meeting of the Burnhope Lead Mining Company is published in another column. It will be remembered that at the opening of this mine a very rich vein of lead ore was met with, estimated to yield in some parts from 16 to 20 tons per fathom of galena, and about 7000 £ worth of ore has been raised from the top sills, but not having pumping machinery the mine got flooded with water, stopping operations for a time. A pumping-engine has been put down and a main shaft sunk 200 ft., at which depth fine lead ore has been found in the same vein immediately under the rich course in the higher sills; and the ore is still going down, proving the mine is holding out in depth. A vast quantity of productive ground is being laid open, and new crushing and dressing machinery of the most improved principle is being erected. The low level is being pushed forward in a strong north and south vein, from 5 to 6 ft. wide, and in a few weeks a powerful east and west vein will be cut; and as the ground on both sides of this vein has been very productive it is causing a great deal of excitement in the district, and as the mine only requires more efficient machinery to keep pace with the output of which it is capable the shareholders congratulate themselves on the possession of a royalty which promises, when developed, to be second to none in the North of England.

Eaton, 1 to 1½; some very good news has just been received from these mines. It appears that while the men were dressing down the sides of the Clayton shaft to put it in proper order for resuming active operations in the deep levels they came upon some patches of ore left by the old workers. These were carefully examined, and one of them, at a depth of about 50 fms. from the adit level, proved to be the commencement of a fine pipe of copper ore. It has consequently been further explored, and we are informed that it continues to improve the farther it is opened up. It is found in entirely new ground, no old workings being either directly above or below it; so it is possible that it may lead to another enormous deposit like that which many years ago produced the great returns for which these mines were so celebrated. We are also informed that a well-known engineer who has this week inspected the mine writes: "I think you may now set your minds at rest about this mine, as the mineral is unquestionably here in large quantities." It is further stated that an improvement has set in at other parts of the company's property.

Roman Gravel, 3½ to 3¾; the half-yearly general meeting was held on Wednesday, when a dividend of 2s. 6d. per share was declared. From the report of the proceedings in another column it will be seen that a long discussion took place with regard to the high rate of royalties paid, notwithstanding the present greatly depressed price for lead ores, being about 6 £. 10s. to 7 £., as against 14 £. to 17 £. formerly. The Chairman expressed his opinion that great injustice was pursued by the mine lord in not coming to an amicable arrangement with the company, and it is yet to be hoped that he will do so.

Leadhills, 1½ to 1¾; at the meeting on Wednesday a dividend of 1s. 6d. per share was declared. Full particulars of the proceedings will be found in another column, and will be read with interest. For any mine lord, writes a correspondent, to "insist on charging a company the heavy weight of royalty of one-ninth of the produce with lead ores selling at about 6 £. to 6 £. 10s. per ton, the same as

when ores were selling at 15 £. to 16 £. per ton is, to say the least, a most illiberal proceeding, and it is no wonder that the shareholders at the meeting expressed dissatisfaction at such conduct. It appears from the proceedings at the meeting that his lordship has only recently been to the mine, and expressed his appreciation of the development of the property and the surface arrangements for dressing the ores, as well as the smelting operations and the various improvements to the property, and by which his royalty has been increased. It is, therefore, to be hoped that his lordship will further consider the matter favourably to the company as his tenants."

In reference to the affairs of the Wabash, St. Louis, and Pacific Railway Company, the Railway Share Trust Company, at the request of Mr. Joy, the President of the above company (who is now in England), announce a meeting of the bondholders on Friday next, when Mr. Joy will attend and explain the position of the company. That gentleman, in a circular, issued by him, states:—"I find the financial position of the company made it absolutely necessary that I should consult with the bondholders in regard to the measures to be adopted for the board's relief, and to ascertain if the plan submitted as it is, or with any agreed modification, will be accepted by the bondholders."

Messrs. C. de Murrieta and Co. announce that they are authorised to pay the 18th dividend on shares registered to receive payment in London of the Banco Nacional, Buenos Ayres, the amount payable being the equivalent of six hard dollars per share of \$100, less expenses.

Messrs. I. Thomson, T. Bonar and Co., notify that the dividend for the half-year ended June 30 of the Tournay to Jurbise, and Lenden to Hasselt Railway Company has been fixed at the rate of 6s. per preference share, and 6s. 2d. per dividend share. The coupons will be cashed on and after Oct. 1, either at Brussels or in London.

It is notified that the half yearly coupons for interest on the bonds of the Ottoman Defence Loan, 1877, due Oct. 10, will be paid on and after that date by Messrs. Glyn, Mills, Currie, and Co.

#### THE MINERAL PHOSPHATE INDUSTRY.

For some time past the valuable deposits of phosphate of lime met with in Norway and in Canada have been turned to commercial account, with results that cannot but be gratifying to all concerned, yet comparatively little British capital has hitherto been invested in them. An opportunity, however, is now afforded to repair the omission, the Norway Phosphate Company, with a capital of 100,000 £, in shares of 10 £. each, having been formed to acquire some valuable phosphate of lime mining rights on the Haukedal property, about 20 miles from Kragero, in the province of Bratsberg. It is considered that the Haukedal phosphate deposits contain all the elements of a genuine investment of extraordinary promise. The success met with on the adjoining property, referred to below, confirms the conclusions arrived at by the experts as to the extent and richness of the beds. The amount to be paid the vendor in cash (15,000 £) will, it is said, barely recoup him his outlay to date for the purchase of the property, exploratory work already done, and expenses incurred; so that he depends mainly for his profit upon his deferred shares, and will reap none unless the company is a success. In order to protect the interests of those who subscribe the working capital, the Articles of Association provide that the holders of share warrants to bearer, which will represent the vendor's deferred shares, will not be entitled to any votes at the general meetings of the company, in respect of such shares. The control of affairs is, therefore, effectually secured to the ordinary shareholders.

The phosphate is of the very highest class, of which very little has yet been discovered in the world. It can be placed in England at a total cost of 2 £. per ton, which leaves a very wide margin for profit. This calculation is based on a thickness of lode of 8 in. only, whilst in one of the openings made a thickness of 12 in. has been already reached. The adjoining property has been worked with great success for more than seven years, and has made the fortunes of its owners. It has recently earned profits equal to 50 per cent. per annum on a capital of 160,000 £. The workings of the principal vein, which commenced on surface indications of less than 1 in. wide, have been carried to a depth of over 1100 ft., and it is stated that the vein which has been continually increasing to over 14 ft. in width is better and richer at that depth than at any point above.

The prospects, which will be found in another column, states that the extraordinarily rapid development of the manufacture of artificial manures, of which phosphate of lime forms the principal ingredient, has given a powerful impetus to the search for this mineral in all parts of the world, and large quantities are annually imported into this country from America, Canada, Spain, France, and some of the West India Islands. The percentage of phosphate of lime contained in the mineral from these different sources varies from about 40 to 70 per cent., and many of them contain large quantities of iron, alumina, and other deleterious constituents which detract from their value. It may confidently be stated that the Norway phosphates from Bamble are amongst the richest and purest yet discovered in quantity in any part of the world. It is obvious that if it is profitable to import comparatively inferior phosphates from Canada, from Sombro in the West Indies, and from the islands on the coast of South America, it must be much more so to bring 80 to 90 per cent. mineral from a part of Norway which is within three days' sail of England.

**VICTORIA GOLD (Venezuela).**—The lode has been cut in the adit level, worth 3 ozs. of gold per ton, thus proving the mine to be rich in depth. The failure of Scholl's patent stamps is to be greatly deplored, as very considerable delay has been caused thereby. However, arrangements are being made for fully equipping the mine with machinery of the same kind as that in use at El Callao. The result may now be considered beyond the shadow of a doubt. Thus 10 heads of stamps, crushing (say) 12 tons of quartz per day, would only 2 ozs. of gold per ton, would yield 600 ozs. of gold per month, value 2400 £., leaving a profit of about 2000 £. per month.

**BRATSBERG.**—The settled produce of the bulk of the ore, per John Evans, is 22½, and the price is 11 £. 8s. 5d. per ton.

**NEDENES COPPER MINES.**—By further advices up to Sept. 25 these mines continue to look well, and in the 50 fm. level cross-cut to north lode they have come into a large course of mundic, which is a most favourable indication of soon meeting with good copper in this lode, as was the case in Skytmur lode, now turning out so well. This week they intended laying their ore-hear for calcining. Mr. Napier writes—"I am pleased to see such good ore being raised from Skytmur Mine. I have every confidence that it will smelt well, and give a good regulus."

**OSCAR GOLD MINE.**—By advices, dated Sept. 24, it is stated that the north-east level still continues rich for gold.

**THE WEST KITTY DISTRICT.**—Dealers in the following mine shares are this day quoting:—Polberro, 1½ to 2½; Trevaunance, 2 to 2½; West Polberro, 10s. to 15s.; and it is stated that these shares have advanced because of the highly satisfactory state of the mines, as shown at the recent meetings of shareholders.

At Redruth Tackling, on Thursday, 823 tons of ore of 8 average produce, and containing 66 tons 1 cwt. of fine copper, were sold for 2826 £. 17s. 6d., being 3 £. 8s. 6d. per ton of ore, 8s. 6½d. per unit, or 42 £. 16s. per ton of fine copper in the ore, and an average standard of 77 £. 5s. Subjoined are the particulars of the two last sales.—

Date.	Tons.	Standard.	Produce.	Per ton.	Per unit.	Ore copper.
Sept. 18	2289	40	57½	£29 9 0	8s. 2½d.	£41 10 6
Oct. 2	893	77	50	£8 8 0	8s. 6½d.	£42 16 0

Compared with the last sale the standard has been stationary.

**COLLIERY MANAGER.**—REQUIRED AT NCR, A FIRST-CLASS MANAGER to superintend an extensive undertaking abroad. Superior administrative capacity, with a knowledge of Mechanical Engineering and working of Colliery Railways essential. Apply with testimonials, and stating salary expected, by letter, to "X. X. X." care of J. W. Vickers, Nicholas-lane, Lombard-street, London, E.C.

#### C. PASS AND SON, BRISTOL,

ARE BUYERS OF  
LEAD ASHES, SULPHATE OF LEAD, LEAD SLAGS,  
ANTIMONIAL LEAD, COPPER MATTE, TIN ASHES, &c.,  
and DROSS or ORES containing  
COPPER, LEAD, AND ANTIMONY.

#### GEO. G. BLACKWELL,

26, CHAPEL STREET, LIVERPOOL,  
HANDLES  
MANGANESE, BARYTES, SPARS, and ALL ORES on SALE  
or PURCHASE.

#### ASSAYING.

#### Mr. EDGAR JACKSON,

(Assoc. R. S. M., F. I. C.)  
RECEIVES PUPILS, and ASSAYS ALL KINDS OF ORES.  
106, QUEEN VICTORIA STREET, LONDON, E.C.

#### JOHN LYSAGHT (LIMITED),

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#### BUYERS OF

ZINC ASHES, ZINC OXIDE, HARD SPELTER,  
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COMPANIES FORMED ON EQUITABLE TERMS.

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Mines inspected and reported on. Assays and valuations effected. Has on hand offers of Mines of Copper, Calamine, Blende, Phosphat of Lime, Tin, Lead, Iron, Manganese, and Manganiferous Iron Ores.

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Mines and other properties in any part of Australasia inspected. Reports by Government Geologists procured where required. Terms very moderate, and expense of sending Engineer from England avoided.

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LAND AND MINE SURVEYOR,

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PREPARES MINING PLANS AND SECTIONS, AND UNDERTAKES  
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(Four years Chief Chemist and Metallurgist to the Rio Tinto Company, 13 years experience in Cornwall, Author of numerous works on Mining and Mineralogy)

ADVISES ON GENERAL CHEMICAL AND MINING MATTERS, AND  
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GERMAN SILVER, SHEET and WIRE, suitable for  
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#### BARKER AND ALLEN,

OOZELL STREET NORTH, BIRMINGHAM.

#### MR. W. B. COBB, 29, BISHOPSGATE STREET WITHIN, LONDON.

Special information and business in all mines in the United States of Colombia—Tolima, Western Andes, Colombian, and other gold and silver mines in that country.

In direct communication each mail with the highest mining authority in Colombia, through whose private advice I am able to give most valuable information as to mines in the Tolima district, and other mines in the country.

**MESSRS. PENNINGTON AND CO., SWORN BROKERS AND SHARE DEALERS, 13, MOORGATE STREET, LONDON, E.C.**  
BUSINESS IN ALL DESCRIPTIONS OF STOCKS, MINING and other SHARES.  
ESTABLISHED 1869—BANKERS: ALLIANCE (Limited).

**MR. W. MARLBOROUGH, STOCK AND SHARE DEALER, 29, BISHOPSGATE STREET, LONDON, E.C. (Established 30 Years),**  
Can sell the following SHARES:—

60 Akankoo, 8s.	35 Eberhardt, 5s. 6d.	20 Oscar Gold, 10s paid, 15s. 9d.
75 Almada, 4s. 6d.	40 Frontino, 13s. 9d.	20 Panuclillo, £3 12s. 6d.
30 Birdseye Creek, 13s.	25 Gorsead, 2s.	80 Port Phillip, 2s. 3d.
20 Bratsberg, £1 7s. 6d.	30 Great Holway, 8s. 9d.	20 Prince of Wales, 9s.
150 Balkic, 3s. 9d.	60 Hoover Hill, 5s.	50 Potosi, 7s. 6d.
50 Colombian Hyd., 9s. 6d.	75 Kapanga, 1s.	10 Roman Gravel, £37s 6d.
25 California Gold, 11s.	20 Leadhills, £1 8s. 9d.	25 Ruby, 15s.
50 Callao Bis., 9s. 6d.	40 La Plata, 5s. 3d.	10 Richmond, £3 15s.
150 Chile Gold, 2s. 3d.	25 Lisbon-Berlyn, 5s. 6d.	10 Tolima A, £8½.
75 Chontales, 3s. 6d.	25 Marke Valley, 11s. 3d.	10 Tolima B.
45 Cartago, 10s. pd., 6s.	20 Montana, £1 11s. 3d.	15 Uni. Mexican, £2 12 6
50 Devon Friend, 2s. 6d.	5 Mona, 15s.	50 Victoria, 6s. 3d.
40 Don Pedro, 5s.	125 Nouveau Monde, 2s 3	150 Wheel Coates, 1s. 6d.
30 East Rose, 8s. 6d.	40 Organos Gold, 10s.	20 Wheel Orebore, £1 3s 9
25 Ecton 21s. 3d.	25 Old Shepherds, 13s. 9	30 Orita, 22s.

**PURCHASES FOR FORWARD DELIVERY AT SPECIAL PRICES ON RECEIPT OF DEPOSIT OF 20 PER CENT.**  
BANKERS: ALLIANCE BANK (Limited).

IN THE MATTER OF THE COMPANIES ACTS, 1862 AND 1867; AND  
IN THE MATTER OF THE LAST CHANCE CONSOLIDATED  
SILVER MINING COMPANY (LIMITED).

**THE CREDITORS of the ABOVE-NAMED COMPANY** are required, on or before the 15th day of November, 1884, to SEND IN their NAMES and ADDRESSES, and particulars of their DEBTS or CLAIMS, and the names and addresses of their solicitors (if any), to the Hon. Ashley G. Fossonby, Charles William Hockethorn, and William George Shepherd, of Moorgate-street Chambers, 30A, Moorgate-street, in the City of London, England, the Liquidators of the said company; and, if so required by notice in writing from the said Liquidators, are, by their solicitors, to come in and prove their said debts or claims at such time and place as may be specified in such notice; or, in default thereof, they will be peremptorily EXCLUDED from the BENEFIT of ANY DISTRIBUTION made before such debts are proved.

SNELL, SON, and GREENIP, 1, George-street,  
Mansion House, London,  
Solicitors for the above-named Liquidators.

Dated this 2nd day of October, 1884.

**MINING ENGINEER** of long standing is OPEN to an APPOINTMENT at home or abroad, or to inspect and report. Thoroughly competent. Is a skilled accountant. Good testimonials and references.

Address, "Y," MINING JOURNAL Office, 26, Fleet-street, E.C.

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ESTABLISHED UPWARDS OF FORTY YEARS.

**MESSRS. WATSON BROTHERS**, in referring to their public Circular in the *Mining Journal*, would also observe that they BUY and SELL SHARES at the net market prices of the day in all well-established and respectable Mining Companies; also in English and Foreign Funds Railway Stocks, &c.



**DENT'S** NEW ILLUSTRATED CATALOGUE  
**WATCHES** of High-Class Watches and Clocks at  
 AND Reduced Prices sent Post Free on applica-  
**CLOCKS.** tion to **E. DENT & CO.,** Makers to  
 the Queen, 61, Strand, London, W.C.;  
 or 35, Royal Exchange, E.C.

### NEW FOREST, HANTS.



BY ORDER OF THE COMMISSIONER IN CHARGE OF HER MAJESTY'S  
 WOODS, FORESTS, &c.

**TO BE SOLD, BY AUCTION,** at Lyndhurst, by Messrs. F. ELLEN  
 and SON, on THURSDAY, October 9, 1884, at Three o'clock in the after-  
 noon,—

117,100 SCOTCH FIR POLES, suitable for Pit Props, Railway Sleepers, &c.;  
 300 LARCH POLES, suitable for Fencing, &c.; and  
 500 LARGE BEECH POLES.

Catalogues and conditions of sale, with further particulars, may be obtained  
 on application to the Hon. G. W. LASKER, the Queen's House, Lyndhurst,  
 Hants; or to the Auctioneers, Andover.

**THE COMMISSIONERS OF SEWERS FOR THE LEVELS**  
 of CALDIOT and WENTLORGE, in the County of Monmouth,  
 REQUIRE the SERVICES of an experienced VALUER OF MASONRY and  
 EARTHWORK to INSPECT the WALLS and other SEA DEFENCES on both  
 Levels, and assess the sum required (1) for putting the same into an efficient  
 state of repair; and (2) the cost on an average of years to maintain the same  
 when so repaired with a view to commute the liabilities by payment of an  
 annual rent charge.

The Level of Caldiot extends from the mouth of the River Wye, near Chepstow,  
 to the mouth of the Usk at Newport; and the Level of Wentlorge from  
 the mouth of the River Usk, at Newport, to Rumney Bridge, near Cardiff, a distance  
 in the whole of about 35 miles.

No expenses incurred before appointment by any of the candidates will be  
 allowed.

Previous experience in Engineering Work of the kind indispensable.  
 Applications, stating amount of remuneration required, to be sent in to the  
 undersigned on or before 18th October instant.

By Order, **H. STAFFORD GUSTARD,**

Usk 1st October, 1884. Clerk to the Commissioners.

### THE LEADHILLS SILVER-LEAD MINING AND SMELTING COMPANY (LIMITED).

Notice is hereby given, that the Directors have this day declared  
 a DIVIDEND OF ONE SHILLING AND SIXPENCE per share, free  
 of income tax, PAYABLE on and after THURSDAY, the 16th inst.,  
 to the shareholders now on the books of the company.

By Order, **FELIX F. WILSON, Secretary.**

30 Finsbury-circus, London, E.C., 1st October, 1884.

### ROMAN GRAVELS MINING COMPANY (LIMITED).

Notice is hereby given, that the Directors have this day declared  
 a DIVIDEND OF TWO SHILLINGS AND SIXPENCE per share,  
 free of income tax, PAYABLE on and after THURSDAY, the 16th  
 inst., to the shareholders now on the books of the company.

By Order, **FELIX F. WILSON, Secretary.**

30, Finsbury-circus, London, E.C., 1st October, 1884.

### NEW SOUTH WALES GOVERNMENT THREE-AND-A-HALF PER CENT INSCRIBED STOCK.

ISSUE OF £5,500,000, REPAYABLE AT PAR 1st OCTOBER, 1884.

First Dividend, being Six Months' Interest, payable 1st April, 1885.

MINIMUM PRICE OF ISSUE, 92 PER CENT.

Authorised by the Colonial Parliament under Acts 44 Victoria,  
 No. 28, and 46 Victoria, No. 12, for the construction of Railways and  
 other Public Works, and secured upon the Consolidated Revenues of  
 the Colony.

The GOVERNOR and COMPANY of the BANK OF ENGLAND  
 give notice that they are authorised to RECEIVE on TUESDAY,  
 7th October next, TENDERS for £5,500,000 New South Wales Three-  
 and-a-half per cent. Inscribed Stock, repayable at par 1st October,  
 1884.

The books of the Stock will be kept at the Bank of England, where  
 all assignments and transfers will be made. Holders of the Stock  
 will be able, on payment of the usual fees, to take out Stock  
 Certificates to Bearer, with coupons attached, which Certificates  
 may be re-inscribed into Stock at the will of the holder.

All Transfers and Stock Certificates will be free of Stamp Duty.

The Dividends on the Stock will be payable at the Bank of  
 England half-yearly, on 1st April and 1st October, and the first six  
 months' interest, calculated upon the nominal amount of Stock, will  
 be payable 1st April, 1885.

Dividend Warrants will be transmitted by post if desired.

By the Act 40 and 41 Vic. ch. 59, the Revenues of the Colony of  
 New South Wales alone will be liable in respect of this Stock and the  
 Dividends thereon, and the Consolidated Fund of the United  
 Kingdom and the Commissioners of Her Majesty's Treasury will  
 not be directly or indirectly liable or responsible for the payment of the  
 Stock or of the Dividends thereon, or for any matter relating  
 thereto.

Tenders may be for the whole or any part of the Stock, and must  
 state what amount of money will be given for every £100 of Stock.  
 Tenders for other than even hundreds of Stock, or at a price includ-  
 ing fractions of a shilling other than sixpence, will not be accepted.  
 Tenders are to be delivered at the Chief Cashier's Office of the Bank  
 of England before two o'clock on Tuesday, 7th October, 1884.  
 Tenders at different prices must be on separate forms. The amount  
 of Stock applied for must be written on the outside of the tender.

The minimum price, below which no tender will be accepted, has  
 been fixed at £92 per cent.

A deposit of five per cent. on the amount of Stock tendered for  
 must be paid at the same office at the time of the delivery of the  
 tender, and the deposit must not be enclosed in the tender. Where  
 no allotment is made the deposit will be returned, and in case of  
 partial allotment the balance of the deposit will be applied towards  
 the first instalment.

In the event of the receipt of tenders for a larger amount of Stock  
 than that proposed to be issued at or above the minimum price, the  
 tenders at the lowest price accepted will be subject to a *pro rata*  
 diminution.

The dates at which the further payments on account of the Loan  
 will be required, are as follows:—

On Tuesday, 21st October, 1884, so much of the amount tendered  
 and accepted as, when added  
 to the deposit, will leave  
 Seventy-five Pounds (Sterling)  
 to be paid for each hundred  
 pounds of Stock.

On Thursday, 20th November, 1884, £10 per cent.

On Wednesday, 14th January, 1885, £25 per cent.

On Wednesday, 18th February, 1885, £20 per cent.

On Monday, 23rd March, 1885, £20 per cent.

The instalments may be paid in full on or after the 21st October,  
 under discount at the rate of £2½ per cent. per annum. In case of  
 default in the payment of any instalment at its proper date the  
 deposit and instalments previously paid will be liable to forfeiture.

Receipt Certificates to Bearer, with a coupon attached for the first  
 dividend, payable 1st April, 1885, will be issued in exchange for the  
 provisional receipts.

The Stock will be inscribed in the Bank Books on or after the  
 1st March, 1885, but Scrip paid up in full in anticipation may be  
 forthwith inscribed.

No tender will be received unless upon the printed form, which can  
 be obtained at the Chief Cashier's Office, Bank of England, and of  
 Messrs. MULLENS, MARSHALL, and Co., Stock Brokers, 4, Lombard-  
 street, London, E.C., and of the Agent-General for the Government  
 of New South Wales, 8, Westminster chambers, Victoria-street, S.W.  
 Bank of England, London, 29th September, 1884

### Notices to Correspondents.

**FRENCH CROWN JEWELS.**—"L. K. J." (Beaumont-square).—We suppose the Pitt  
 diamond is still among the French crown jewels; its weight is 136½ carats,  
 and it has been valued at 135,000l., but it seems that in 1701 Pitt bought it of  
 Jamchund for 12,500l., or, as some say, for 10,000l., from a sailor who had mur-  
 dered the slave to whom it belonged. It is a very fine stone, but except for  
 its historical value would certainly be dear at 20,000l. Including this the  
 French crown jewels were stated in 1875 to consist of nearly 80,000 stones—  
 diamonds, pearls, rubies, sapphires, topazes, and a few others, weighing in all  
 under 20,000 carats, so that 150,000l. would at the present time be more than  
 a dealer would give for them; but it is hoped that purchasers will be found  
 outside the wholesale market, and that, therefore, some of the historical stones  
 —such as those of the Duchess Anne of Brittany, and Cardinal Richelieu, for ex-  
 ample—may be got off at fancy prices. For years past diamonds have ceased  
 to be a good investment.

**HONY AND "TRILLAWAY."**—"Shareholder."—We have written nothing disparaging  
 of the mines, and know nothing of them beyond what has been published in  
 the Journal. The remarks of which you complain are in "Watson Brothers  
 Mining Circular," which is an advertisement as much as any of those of any of the  
 other dealers who use the front page. The Editor would not interfere with an  
 advertisement unless it were libellous, and would then merely exclude it. Messrs.  
 H. R. Lewis and Co., and Messrs. Watson Brothers are, no doubt,  
 equally respectable and reliable, but neither have any connection directly or  
 indirectly with the proprietorship of the *Mining Journal*, and never at any  
 time had such connection. The question of reworking abandoned mines is a justifi-  
 cable large one, and we cannot answer off-hand whether the remarks are justifi-  
 cable or not; but "those who live in glass houses should not throw stones." When  
 Messrs. Watson Brothers or the firm under its old name, undertook the re-  
 working of the Parys Mine after its abandonment by Messrs. John Taylor and  
 Sons, they received much worse castigation from the late Mr. John Taylor  
 (who was a very sound miner, and considered it worked out and worthless in a  
 commercial sense) than they have given Messrs. Lewis, and the Parys share-  
 holders must conclude from the largeness and continuity of the dividends  
 which they have received since the concern has been in Messrs. Watson's con-  
 trol how much or how little Mr. John Taylor's opinion was worth consideration.  
 It is, however, indisputable that the largest dividends have always been  
 obtained from reworked mines.

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## THE MINING JOURNAL,

Railway and Commercial Gazette.

LONDON, OCTOBER 4, 1884.

### "THE INCREASE AND DIFFUSION OF KNOWLEDGE AMONG MEN."

An appropriate reminder of the fact that the large majority of  
 Technical Schools and Colleges throughout the country are com-  
 mencing their sessional labours during the present week—both staff  
 and student refreshed by the well-earned vacation they have been  
 enjoying—is given by the receipt of the new annual report—that  
 for 1882—of the Board of Regents of the Smithsonian Institution,  
 founded on a bequest for the "increase and diffusion of knowledge  
 among men," and under conditions best calculated to ensure the  
 benefactor's wishes being carried out, and, what is no less important,  
 to promote and maintain the utmost good feeling between the United  
 States and this country. The benefactor, JAMES SMITHSON, was an  
 Englishman, a natural son of the first Duke of Northumberland  
 by ELIZABETH MACIE, born about 1765, and educated at Oxford  
 under the name of MACIE, graduating at Pembroke College in  
 1786. In the following year he was elected F.R.S., and, de-  
 voting himself to science, chiefly chemistry and geology, he  
 became the friend of DAVY, BANKS, and WOLLASTON, and  
 contributed largely to the scientific literature of the day. A few  
 years after graduating he took his father's name, which, therefore,  
 becomes perpetually and indelibly connected with the glorious  
 scientific institution which originated in his munificent bequest to  
 the United States for the purpose mentioned. The amount origi-  
 nally received was \$515,169l., subsequently increased by the residuary  
 legacy to \$541,379-63, which has produced at least as much benefit  
 to mankind as any bequest of equal amount during the century.

The acceptance by Congress of the bequest dates from July 1,  
 1836, but it was not until Aug. 10, 1846, that the Smithsonian In-  
 stitution was established, the corner stone of the beautiful neoclassical,  
 ecclesiastical-looking structure which now contains its treasures  
 having been laid with Masonic ceremonies on May 1, 1847, in the  
 presence of President PALK and his cabinet, the brilliant inaugural  
 oration being delivered by the Hon. GEO. M. DALLAS. The early  
 progress of the Institution was duly reported in the *Mining Journal*  
 at the time, though probably few then thought that the Smithsonian  
 Institution would so soon attain the high celebrity and world-wide re-  
 putation it now enjoys. The amount of useful work done by the Institution  
 reflects the highest honour and credit upon all who have occupied  
 the proud position of regent, and the publications of the Institution,  
 of which there are three series, form extremely valuable and con-  
 tinuous works of reference. There are the Contributions to Know-  
 ledge, a handsome quarto series; the Miscellaneous Collections in  
 octavo; and the Annual Report, to which we have just referred,  
 also in octavo. The first and second series are printed at the ex-  
 pense of the Institution, and presented gratuitously to specialists,  
 and sold at the cost of printing and paper to others desiring them.  
 The Annual Reports are printed by Congress, and distributed gra-  
 tuitously to teachers and others applying for them, and who may be  
 deemed suitable recipients. To secure the publication of a paper  
 in the Smithsonian volumes is everywhere regarded to be as great  
 an honour as to procure its admission to the Transactions of the  
 Royal Society. Nothing is admitted until critically examined and  
 passed by a competent committee, and the merit of every accepted  
 memoir is vouched for by the names of the commission being given  
 on the reverse of its title-page. Beyond the presentation to  
 the author of a few copies of his paper, and the payment in  
 some instances of the cost of experiments, computations, and so on,  
 no payment is made for communications, the author al-  
 ways regarding the association of his name with that of SMITHSON  
 as an ample reward. It should be well understood that the mission  
 of the Smithsonian Institution differs from that of a college or  
 university, since it aims at adding to existing knowledge rather than  
 at teaching what has already been ascertained. No effort is spared  
 to carry out the benefactor's intention; and whilst the Americans  
 heartily appreciate his munificence, Englishmen have equally good  
 cause to be proud of the spirit in which the bequest has been received  
 and applied by the United States.

The amount of information contained in the present volume is  
 enormous, and the suggestions made with regard to various matters  
 are of great value, whilst the importance of the Record of Recent  
 Scientific Progress may be judged of from the fact that the Intro-  
 duction is contributed by the secretary—Mr. SPENCER F. BAIRD,  
 and the several sectional reports by equally competent authorities  
 upon the subjects they deal with. Astronomy is reported by E. S.  
 HOLDEN, geology by T. STERRY HUNT, geography by F. M. GREEN,  
 meteorology by CLEVELAND ABBE, physics by G. F. BARKER, chemistry  
 by H. CARRINGTON BOLTON, mineralogy by EDW. S. DANA, botany by  
 W. G. FARLOW, zoology by THEODORE GILL, and anthropology by O. T.  
 MASON. There are numerous miscellaneous papers relating to an-  
 thropology, an excellent index, and an abundance of information;  
 so that it would be difficult to suggest how the various details

brought together could be issued in a form better calculated to  
 convey complete and readily utilisable knowledge to the earnest  
 reader; so that whilst the student and scientist may well be proud  
 of the volumes issued, the United States should not be less proud  
 of the great institution which issues them.

### PRODUCTION OF IRON ORE.

As some of our oldest ironstone fields are fast becoming exhausted  
 attention is being directed to the probable districts for supplies in  
 the future. It appears that in some of our best known districts,  
 where the iron ore has been raised from the coal measures, or in  
 connection with them, less than ever is now being raised; for, sin-  
 gular to say, but little is doing in the finer hematites of Cornwall,  
 which at one time were worked on a rather extensive scale. More  
 dependence is being placed in the ores peculiar to the lower coalites,  
 and during the last few years several new fields have been opened  
 out which are capable of yielding an almost unlimited supply. The  
 resources of North Yorkshire continue to be heavily drawn upon,  
 but they are capable of standing. It is different as regards West  
 Yorkshire, where the old mines have been nearly abandoned in favour  
 of the stone obtained from Lincolnshire, which is most plentiful,  
 and is connected by railway with South and West Yorkshire.

Most of the ironstone used in the Derbyshire furnaces not so many  
 years ago was raised inside that county, but now scarcely any is  
 worked, the ironmakers taking their supplies principally from North-  
 amptonshire and Rutland, where the stone has only recently been  
 disturbed. Northamptonshire also supplies a good deal of ore to the  
 furnaces in South Wales, for the local ore is not now worked to any-  
 thing like the extent it was even 10 years ago. North Wales has  
 plenty of good ore, but there is not much of it raised; but no doubt  
 it will be looked to before long, more especially as it looks as if the  
 Shropshire field is becoming exhausted. Northumberland and Dur-  
 ham contain considerable deposits of spathose, carbonate, and siliceous  
 hematites, but have gradually declined before the cheaper and  
 more plentiful ores of Cleveland. Ireland does not appear to have  
 made much progress in the development of its fine beds of ironstone,  
 whilst the hematites of Cumberland and Lancashire have been in  
 increasing demand, especially for steel making. The progress made  
 and otherwise in the various districts, will be seen from the quan-  
 tity of ore raised in 1874 and 1883:—

	1874.	1883.
Cornwall .....	45,006 .....	670
Devonshire .....	21,313 .....	5,240
Gloucester, &c. ....	299,399 .....	177,451
Oxford, &c. ....	41,539 .....	56,040
Northamptonshire ..	1,056,479 .....	1,290,087
Lincolnshire .....	463,239 .....	1,006,219
Shropshire .....	303,966 .....	235,900
Derbyshire .....	239,520 .....	16,838
Warwickshire, &c. ....	92,214 .....	31,404
Staffordshire, North ..	1,032,362 .....	1,682,600
Staffordshire, South ..	141,505 .....	150,179
Lancashire .....	915,358 .....	1,371,557
Cumberland .....	1,120,170 .....	1,477,052
Yorkshire, North .....	5,614,323 .....	6,756,055
Yorkshire, West .....	370,960 .....	170,832
Northumberland, &c. ....	122,480 .....	51,258
North Wales .....	42,228 .....	10,764
South Wales .....	661,616 .....	150,538
Scotland .....	2,119,770 .....	2,228,851
Ireland .....	140,360 .....	146,452

### THE SHEFFIELD STEEL MANUFACTURERS, AND THE IRON AND STEEL INSTITUTE.

The fact of the leading steel manufacturers in Sheffield declining  
 to invite the members of the Iron and Steel Institute to visit the  
 great centre of steelmaking and cutlery manufacturing, on the  
 ground that by so doing they would have to throw open their works  
 to foreigners engaged in similar productions abroad, has called forth  
 a good deal of comment not altogether favourable to the home ma-  
 nufacturers. But on their behalf it may be stated that they have  
 long complained of many of the continental manufacturers, who in  
 such materials as tools, scissors, cutlery, &c., not only pirate their trade  
 marks, but in some instances brand the goods they produce with  
 some of the best known names in Sheffield. But there are certain  
 processes connected with the production of steel which the Sheffield  
 makers naturally enough do not desire to become generally known,  
 as they wish to maintain their prestige as producers of the finest  
 steel in the world. This they consider they have held up to the  
 present time, although they have had many opponents on the Con-  
 tinent and America. So far as regards the manufacturers some of  
 those in America not only imported the raw material from Sheffield,  
 but the men from the same place, as well as the water, yet after all  
 there was not the success anticipated, so that steel of the best  
 qualities is still exported from the hardware town to America.  
 Only recently, too, a military commission appointed by the United  
 States Government has visited the works, so far as allowed in this  
 country, and have reported specially on the properties of the steel  
 we produce.

The commission, it appears, has reported unanimously in favour of  
 the system introduced by Sir J. WHITWORTH as regards steel forg-  
 ings, on the ground "it gives better promise than any other of sec-  
 uring that uniformity so indispensable in good gun metal." Sir JOSEPH  
 WHITWORTH has found the hydraulic press of great value in forg-  
 ing, whilst the larger the mass the more effective was the pressure.  
 The pressure that was put upon the fluid steel was about 6 tons to  
 the square inch, and in applying that pressure to a column of metal  
 it was diminished one-eighth of its whole length in less than five  
 minutes, the air cells being thoroughly expelled, provision being  
 made for the escape of the gases. But a good deal after all must  
 depend upon the quality of the steel, and the difficulty even now is  
 to produce it in large quantities uniform in every way. Some of our  
 makers to ensure uniformity analyse all the raw material that goes  
 to make up what they produce in a complete state. Still in the  
 making of steel by such well-known firms as those of TURTON and  
 SONS, JESSOP, and others, there are no doubt certain appliances  
 used or adopted which they do not wish to make public, or expose to  
 the notice of the intelligent foreign metallurgist or manufacturer, not  
 being protected by patents, which are not always safe from piracy  
 even when patented. There may not be much that is new with re-  
 spect to the production of cutlery, machine, and small tools, or even  
 patent steel wheels, but there is certainly one other speciality in  
 which the Sheffield manufacturers beat all others, and have secured  
 a monopoly—we allude to the composite armour-plates.

French and German manufacturers, including KRUPP, of Essen,  
 have all tried their hands at them, but without success. Some  
 American makers have also tried to produce them so as to stand  
 the same tests as those made at Sheffield, but have failed. The  
 consequence is that the two great works of Sir J. BROWN and Co.,  
 and CAMELL and Co., are now making their steel-faced plates for  
 most of the continental Governments, as well as for that of America.  
 In the interests of the town, as well as that of the country as well,  
 it is to be hoped that the monopoly now enjoyed by the two great  
 companies will long be held by them; no one, therefore, can  
 blame the heads of these companies if they do all they can to  
 maintain the reputation they have for certain plates, the bringing  
 of which to their present state of perfection has only been effected at  
 great cost, time, and labour. Taking these facts into consideration,  
 it will be admitted that the Sheffield manufacturers have some ground  
 for not inviting even so highly important a body as the Steel and  
 Iron Institute, many of whose members are connected with the lead-  
 ing continental establishments, to visit the town and their works, al-  
 though to some this may appear ungracious; but no one who knows  
 our Sheffield manufacturers can even hint at a want of courtesy or  
 hospitality on their part.

**IMPROVED MINING MACHINERY.**—That much of the success of the  
 miner depends upon the machinery, especially for crushing and  
 pulverising, which he uses none will deny. Any improvement,



As far as Rhyl a railway ride along the North Wales coast is not



a very inspiring affair at the present moment, abandoned collieries and abandoned lead mines being among the most prominent objects to the landward. On the sea-side, the oil, chemical, and alkali works are doing well. At the smelting-works there are large stocks of pig-lead. After passing Abergele some signs of life are discernible in the limestone quarries of Llysfaen and Llandulas. There are three of them whose present combined output amounts to 700 tons a day.

Disaffections among the colliers is spreading somewhat. The men at the Llay Hall Colliery, near Wrexham, to the number of 350 have struck work against a reduction of 5 per cent. in their wages, which the owners seek to enforce. It is felt that this is an inopportune act now, just before the beginning of winter. A good trade is expected this winter, and preparations are being made for it. I have not seen the port of Connah's Quay so crowded with colliery timber as it was when I passed it yesterday.

One pleasant feature of the recent meeting of the Iron and Steel Institute, at Chester, was the conversation held by the Chester Society of Natural Science in honour of the visit. It was a nice combination of theoretical and practical science—of organic and inorganic geology. The Government are about to construct harbours and piers along the west coast of Ireland. Will no patriotic Welshman agitate in favour of the like advantages along the coast of Wales. It seems a national disgrace that from Holyhead to Milford Haven, along the shores of the greatest sea highway of the world, there should not exist a port into which a vessel drawing only 8 ft. of water can enter in all states of the tide. This fact alone materially affects for the worse seafaring off the coast of Wales. The slight improvement in the iron trade continues while for machinery and finished ironwork there is a fair demand. A little better demand for goods has sprung up in the pottery districts, and the salt trade of Cheshire is in a fairly satisfactory condition.

#### TRADE IN SOUTH WALES.

Oct. 2.—There is no change to report in the activity of the Steam Coal Trade of South Wales. Cardiff shipped last week 127,412 tons foreign, and about 20,000 coastwise, with 625 tons patent fuel; Newport, 29,861 tons foreign, and 20,807 castwise; Swansea, 20,946 tons foreign, and about 14,000 coastwise, with 4440 tons patent fuel. House coal is in weak demand, and so is small steam coal, but patent fuel well maintains its position.

The directors of the Taff Vale Railway propose to make a mineral line from Penarth to Barry, so as to enable them to carry coal to that port when it is made. A bill will be introduced for this purpose into the House of Commons next session.

The growth of the coal trade of Cardiff is well illustrated by the following figures:—In 1875 the shipments were 3,829,631 tons; in 1876, 4,804,509; 1877, 5,180,651; 1878, 5,255,673; 1879, 5,694,155; 1880, 6,840,298; 1881, 7,390,832; 1882, 7,744,838; 1883, 8,750,578. The returns for 1884 show that the gradual increase is well maintained.

The output of coal in the Rhondda Valley in 1873 was 2,418,959 tons; last year it was 7,071,071.

The Bute trustees are reported to have under consideration the making of the Glamorgan Canal into a mineral railway. Lord Bute at present only leases the property.

The Iron and Steel Trades are in a deplorable state. Cardiff only sent away 725 tons last week, and Newport 531 tons. The arrivals of iron ore at Cardiff last week amounted to 4812 tons from Bilbao, and 607 from other places; Newport received 14,030 tons from Bilbao.

The Tin-plate Trade is rapidly falling into its old depressed groove, in consequence of the insane reopenings of closed works. Good IC cokes only fetch 15s. per box, and even 14s. 10d. has been taken. Prices are expected to fall even lower.

#### HEROES OF SCIENCE.

The biographies of the great engineers and inventors of the first half of the present century have been so often and so ably written that it would almost have been thought that difficulty would be experienced in saying anything novel or attractive upon the subject, yet in Prof. Lewis's volume—*Heroes of Science. Mechanicians*. By T. G. LEWIS, M.A., Professor of Mathematics in the Government College, Lahore. London: Society for Promoting Christian Knowledge, Northumberland Avenue—we have a thoroughly readable and instructive series of lives of leading mechanicians not so long as to be tedious, but of quite sufficient length to permit of the record of all that is necessary. Prof. Lewis very justly points out that it is to the efforts to meet the requirements of the "Gentlemen Adventurers in the Mines of England" that we owe those early inventions which have been developed until the magnificent engines we are now accustomed to was reached. The success of the steam-engine has, says the author, been the reward of careful scientific thought on the side of the practical application of science; and whilst being a reward it has also been an encouragement, and hence the material progress of the past century has reacted as a stimulus to intellectual progress, and has probably not been without effect on those branches of science which are at present purely abstract, for there is a close brotherhood between the thinkers who advance science on its practical and those who advance it on its theoretical side, and the interaction between them is beyond question. Commencing with Thomas Savery's "engine to raise water by fire," patented in July, 1698, and described by the inventor in his treatise—*The Miners' Friend*, Prof. Lewis sketches in a few pages the progress made until the time of James Watt, who is the subject of the first sketch, the other heroes being George Stephenson, Richard Arkwright, Samuel Crompton, Henry Maudslay, Joseph Clement, James Nasmyth, Joseph Whitworth, and Charles Babbage; and with regard to each he has shown that there is still much useful to be learned concerning them.

Throughout the volume Prof. Lewis appears to be careful to give especial prominence to the particular qualities and characteristics to which each of the subjects of the memoirs owed his advancement—to the excellence of workmanship of Watt, to the justifiable ambition of Stephenson, and so on—and thus affords useful hints to his readers, that if they would become great they must work earnestly and energetically, and not be deterred by annoyance and disappointment. Perhaps the most interesting of the series is the biography of Charles Babbage, who, to the majority of readers general, is probably far better known as the enemy of organ-grinders than as an ingenious mechanician. Towards the close of his life, says the author, Mr. Babbage attained a notoriety that was not fame—he spared neither expense nor personal trouble in endeavouring to abolish organ-grinders; during one twelvemonth he spent about 104l. in this herculean task. Thinking probably of the gibes with which his well-meant efforts had been received he remarks triumphantly, as though the public had been unconsciously but duly punished for their unsympathising levity by some uncalculable loss, that he was not himself the only sufferer; that amount would otherwise have been expended in giving a year's employment to a skilled workman whose wages are about 2l. per week. Thus Babbage would have deprived a couple of thousand unskilled workmen of a livelihood, and been satisfied to regard the employment of one skilled workman as an equivalent. This view Prof. Lewis does not enunciate, but he refers as evidence that Babbage was a philosopher from his childhood, to the fact that when at school he could not distinguish a half-dram weight from a gold coin. If Prof. Lewis's logic be as faulty as that which he attributes to Babbage his narrative may be of some utility in facilitating a correct guess how it is that highly certificated School Board children are so excessively stupid and useless after they leave school, and so seldom become workmen who are worth employing.

But to turn to the useful work of Babbage it may be said that Prof. Lewis gives a clear and interesting account of the principle of his projected but never completed calculating machine which cost the country some 17,000l. Prof. Lewis records that it was in 1819, after a conversation with Dr. Wollaston on the subject, that Babbage began to devise a machine for computing tables, and adds that Babbage explained that the principle of his machine was the application of the method of differences. The principle involved is

one which is suggested by an examination of any series of numbers formed according to fixed rule, and can be understood by anyone who has learned to add and subtract. Prof. Lewis shows the process for a table of squares; we will add the figures for a series of cubes so that the general application of the principle will be seen. Take the squares:—

1	4	9	16	25	36	49
3	5	7	9	11	13	
2	2	2	2	2	2	

It will be seen that the second line is obtained by writing the differences between the figures on the right and left of them in the first line; these are called the first differences of the original series. The third line is obtained in the same way, and gives the second differences which are seen to be constant. By reversing the process we may find as many terms as we please of the series of square numbers simply by successive additions. Thus 49 is the square of 7. If we desire to find the square of 8 by addition only we merely add the last figure of each line, and obtain 2 + 13 + 49 = 64 which must be the square of 8, and will give us a new diagonal 2, 15, 64; then 2 + 15 + 64 = 81 will be the square of 9, and so on indefinitely. In the series for cubes the figures will be:—

1	8	27	64	125	216
7	19	37	61	91	
12	18	24	30		
6	6	6			

Now, since 216 is the cube of 6 we can obtain the cube of 7 by adding the last diagonal as before—that is, 6 + 30 + 91 + 216 = 343 which is the cube of 7. The figure for the second line of the new diagonal will be 6 + 30 + 91 = 127, or 343 - 216 = 127, and the third line 6 + 30 = 36, or 127 - 91 = 36, so the new diagonal will be 6 + 36 + 127 + 343 = 512 which is the cube of 8. To construct a machine to do such work as this is extremely simple in theory, but in practice the difficulties are enormous. Prof. Lewis's book will afford much food for thought, and may fairly be commended to students and general readers.

#### MINING PROGRESS IN QUEENSLAND.

All the information regarding the Barrier Ranges Silver Mines having hitherto come from residents of the district sanguine of their success, the subjoined outline of the views of a visitor will be interesting. In company with a friend, an old and experienced miner, we started, says he, for Terowie to see the Barrier country. Journeying by way of Cropleys and Taratoo, we arrived at Thackaringa, 16 miles south of Silverton, where the first mines were met with. They are working galena lodes of no great richness. The primitive windlass here represents the only method yet attempted of raising the ore. Without exception also the lode has been followed down on the underlie, thus preventing anything like extensive operations being carried on. It was somewhat significant to find, after hearing that the Umlerumberka Mine would soon require 300 hands, one man at the windlass drawing up stuff from a shaft so much out of the perpendicular that one could almost walk down it. We found Silverton situated on a flat surrounded by low hills, and skirted on one side by a water-course. On this, which is scarcely worthy the name of a creek and two wells, one a little brackish, the people have to depend through the summer. The town has been surveyed in allotments, and studded with galvanised iron shanties, valued at 10l. each. Exorbitant prices are asked for these allotments in spite of the indisposition to buy, arising from the fear that the rival towns of Lake's Camp and Soakage, where the richest surface finds have been obtained, will prevent Silverton growing to any great extent. We examined the Orphan and one or two surface finds at the back of the town, the appearance of which did not impress us very favourably, and we went on toward's Lake's Camp and Soakage, where are situated the Apollyon, Hen and Chickens, Lubra, Pluckup, Pilgrim, Christmas, Morris's Blow, and Onetree Hill.

The Apollyon, the deepest mine on the field, is said to be raising some good ore. Some rich slugs have evidently been found on the surface in this neighbourhood, but there is no defined lode with many of them, and where there is it is wretchedly narrow, often pinching almost if not altogether out. The efforts made to prove whether there is anything permanent about the finds are very unsatisfactory. Rash speculation seems to be the one idea. Almost every claim where a find has been made is in the market, but the prices asked are far above their intrinsic value. There is one mine down 40 or 50 ft., which is being negotiated for at a long figure. A few tons on the surface proved very rich, but the rest is very poor indeed. Some 20,000 acres have been pegged out for mining purposes at Mount Gipps and Pinnacles, about 15 or 20 miles east of Soakage. Directly a discovery is made hundreds of acres all round are taken up. When the rash speculation now going on subsides the permanency of the finds will probably be tested. One thing is certain, and that is that the Barrier field is the last place in the world for working men to go to. There is no work to be had, and to go prospecting the chances are 1000 to 1 against their finding anything, whilst the privations owing to want of water in the summer must be very great.

With regard to the Silverton Mines, the correspondent of the Adelaide Observer writes that little has been done to develop the mines here except the Apollyon, Hen and Chickens, and Lubra. At the former No. 1 shaft is down 115 ft., No. 2 shaft 90 ft. Some splendid ore has been turned out lately. The Hen and Chickens is also turning out well, the shaft is down 113 ft. The Lubra, owned by Messrs. Crispe Bros., is going down splendidly, and has been under offer for 8000l. Tenders are invited by the Barrier Ranges Association for a vertical shaft some 200 or 300 ft., to thoroughly test their property. When this is done it will prove the field to a great extent. The Robert Burns Company are now prospecting their claims. It is needless for men to come here to look for work—the place is swarming with them already. The excitement generally is not so great as it was. With regard to the water supply the Government have only as yet sent an engineer to select sites for tanks and wells on the field. Something should be done at once; the privations during last summer were bad enough, but they will be worse during the coming one, as the population is so much increased. The town of Silverton has grown wonderfully. When an allotment is applied for the applicant has to erect 10l. worth of improvements within 28 days; he then applies for an improvement conditional purchase without competition. This has resulted in the erection of a number of shanties, some not more than 8 ft. by 10 ft.—just sufficient to hold the ground. There are four hotels doing a roaring trade, and three more in course of construction. The late frosts have severely injured the feed, and unless we get early rains there will be very little for the coming summer. Cartage is again on the rise, 8l. per ton being now paid. The coaches still come in loaded from Adelaide and Wilcannia.

An important discovery, proving beyond doubt that water may be obtained almost anywhere throughout what is known as the crustaceous formation, has just been made near the Hergott Springs Railway Station. The boring party was under the charge of Mr. Field, a gentleman belonging to Victoria, and the special object was to see if water could not be procured for the engines without going to the Hergott Springs—a distance of two miles. The water was tapped at 380 ft., and began to flow over the surface at the rate of 90 gallons an hour. The boring was commenced on June 25, and the water was struck on July 31. This is considered very sharp work. The machine used was the Eucla diamond-drill. It cuts clean through the strata, and brings the material up in solid cores or columns, which are of great value to the geologist. The water is stated to be excellent, but the full value of the discovery cannot be estimated until the analysis has been obtained.

MEXICAN MINING PROGRESS.—The mining outlook of the Pachuca district has not presented, says El Eco de Hidalgo, such a fine aspect for many years as it does at the present, for with Santa Gertrudis again on the Dividend List, the Difcultad Mine in bonanza, the Porvenir Mine as rich as ever, and the new lode, which is very rich, at El Bordo Mine, we can truly say Pachuca still carries the away as a silver-producing district. The accident to the pump at San Buena Mine has to a slight extent impeded operations in the lower levels

but this will very soon be remedied. At La Blanca Mine the drift being driven to communicate with the winze, in which paying metal was met with in the old part of the mine, will shortly be completed, which fact must materially affect the price of shares. At La Estrella y Altagrafia Mines a drift is being driven east on the lode, and strong hopes are entertained of meeting with paying ore in a short time. The share as well as every other market has assumed a better aspect since the election of General Porfirio Diaz as President of this Republic, and the renewal of political relations with England has also conducted not a little to benefit the condition of this country, there being now greater confidence in all business matters, without which no country can progress. The house for the large pumping-engine to be erected at El Bordo Mine is almost completed. It is expected that the Dolores engine at the Real del Monte will be set to work in about two weeks' time.

#### WATSON BROTHERS MINING CIRCULAR.

WATSON BROTHERS,  
MINEOWNERS, STOCK AND SHARE DEALERS, &c  
1, ST MICHAEL'S ALLEY CORNHILL, LONDON

The New Van Company is in 30,000 shares of 10s. each; 15,000 have been given to the old shareholders, 15,000 issued to them at 10s. each, and the letters of allotment were sent out on Wednesday week. The capital thus raised is 75000l., and the company hope to make profits at once. The agents are of opinion that the discovery in the western part of the mine is the same course of ore that has been so rich in the eastern part. An independent report which has been handed to us says:—"The stopes between the two shafts from the 60 level downwards are calculated to produce from 45 to 60 tons of lead a month for (say) two years, and can be got away at a profit (say) from 100l. to 130l. a month;" but this does not include the trial at Edwards' shaft. "I consider," the agent goes on to say, "the prospects of the mine to be very good indeed; and if the 150 at Edwards' be reached in slate rock, and the veins not found productive, I shall be very much disappointed; the indications in the 120 south cross-cut speak volumes for a rich lode below."

The additional capital, so far as we understand, is to work the western mine at Edwards' shaft referred to. The old, or eastern mine, where the ore at present is, may make profits to divide at once. The shares were all offered to the old shareholders, and are now called 12s. 6d. per share.

On Friday last the agent of Prince of Wales wrote to the office that a slight accident had happened to the machinery—the nozzle of the engine blew out. Upon this the shares were in London knocked down 4s. per share. The nozzle was put right in a day, and the engine at work again, and the mine in fork on Saturday afternoon. This was referred to at the meeting, which was not only largely attended but one of the most unanimous ever held. The agent, who is never over sanguine, thinks we shall have one of the best tin mines in East Cornwall or Devon; and if the 102 east should continue worth 20l. per fathom he can pay costs of the mine. He is also daily looking for a discovery in the 90 west at the approaching junction of the silver and copper lodes.

The 30 west at New Langford is going into virgin ground, and the agent writes that the lode is large and strong, composed of silvery muncie, quartz, and good stones of copper ore; a strong, masterly lode. A large shareholder in the mine, who has known the district for 40 years, writes us, without having seen or heard of the agent's letter, which arrived at the office by the same post—"I wish to see Langford a great mine, and you are doing all you can to make it so. There appears to be a fine lead lode going west at the 30, in what is called the dark killas, where I hope a rich lead lode exists." We hope so too, and any day may see a change for the better in the property. There are several points of interest, any one of which may turn to account ere long.

Never having believed in, or taken any interest in Indian gold mines, we cannot advise our correspondent. We would not touch a heavily burdened gold mine anywhere.

Our remarks upon mines in this Circular are based upon official and recognised reports; the best, in fact, that we can obtain. There is much, perhaps, at times that we could say, but prefer not saying. We are always, however, glad to answer or advise our correspondent or anyone else privately to the best of our judgment. The nature of mining is so speculative and uncertain that for the last 40 years we have kept before the readers of our Circular and others the above facts, and that while we give our opinions based on the best authorities we can get we cannot on such an uncertain and fluctuating property as mining be held to blame if results are so "very different" to what we have been led, and have thus led others, to expect. There is one thing we can say positively, and that is what we recommended strongly we go into ourselves, and stick to them, and advise "A. X." to do the same. When Crebors dropped to a mere nominal price, and were, in fact, unsaleable, those to whom we had recommended shares did not forget to remind us of it. When, however, the shares rose quickly from 1s. 6d. to 13l. they took all the credit of their speculation in the mine to themselves.

The bottom level at West Crebors looks like coming into ore.

At New Caradon the lode lately cut is 3 ft. wide and improving.

A very good discovery has been made in the Menadue lode in New West Caradon, worth 1 ton of ore per fathom.

LITERARY SUICIDE.—The friends of Venezuela will learn with a little surprise, though not perhaps with entire dissatisfaction, that at the early age of six months the Anglo-Venezuelan Review has deliberately suicided. Born of the chagrin and disappointment of a replaced Venezuelan Minister, and carefully nurtured by himself and friends with vinegar and wormwood, it gave some promise of enjoying a long-continued life of usefulness—for it discussed adversely almost everything connected with Venezuela, and was careful to give greater prominence to petty scandals connected with the internal domestic affairs of the gentlemen whose names were mentioned than to the alleged abuses which have existed in the Republic—but it was not to be so. Acting upon the glorious motto of "Men, not measures" the editorial ability displayed succeeded completely in depriving Venezuelan mining enterprise of the British financial support it would otherwise have received. Messrs. De Rojas Brothers may congratulate themselves upon having introduced into this country a style of attack previously quite unknown in the better class of periodical literature, and are entitled to the congratulations of all, especially of those who desire to see the mines of Venezuela developed and the Republic prosperous, upon their decision with regard to the Anglo-Venezuelan Review—"to suspend further publication for the present for several important reasons," and "during the existence of the present Government."

BRITISH ASSOCIATION.—The success of the recent visit to Montreal was largely promoted by Sir J. W. Dawson, Principal of McGill College, who has recently been knighted. He is looked upon as the leading scientist in the dominion, being especially distinguished for his researches in geology. His popular works on this subject—"The Story of Earth and Man," "Fossil Men," and "The Origin of the World"—are published in this country by Messrs. Hodder and Stoughton.

CANADIAN MINING.—On the whole, says the Montreal Daily Witness, mining in the North-west and beyond cannot be said to have been attended with much success so far. The precious metals exist in paying quantities, but they cannot be got at without a liberal expenditure of capital, which it is difficult to procure at the present depressed time.

COPPER, TIN, AND LEAD.—Messrs. FRY, JAMES, and Co. (Oct. 2) writes:—COPPER has been steady in value since our last, with a moderate demand for consumption and export, sufficient to cause a further reduction in the stock and advised supplies.—TIN: The weakness in the market, noted in our last, has continued, and resulted in a gradual decline in value of fully 3l. per ton.—LEAD continues steady at late rates.



## ITALIAN METALLURGICAL INDUSTRY.

The ironworks of San Giovanni, in the Val d'Arno, were first established in 1872. The company promoting the enterprise was unsuccessful, owing, it is said, to the inferior quality of the products, and in 1880, the works were taken over by the Società delle Ferriere Italiane, by which they are profitably conducted. The official domicile of the company is in Rome, the board of management at Florence. The nominal capital is 4,000,000 lire, of which 2,000,000 lire are paid up. In addition to the works of San Giovanni, and the neighbouring mine of lignite, the company holds the ironworks of Marnano, and on lease those of Tarquinia Corneto (district of Civita Vecchia). The total gross receipts of the company, in 1882, amounted to 328,646 lire 29 c., the expenses to 213,089 lire 57 c., leaving a net profit of 115,556 lire 72 c.

Great improvements have been introduced within the last two years at the works of San Giovanni. New buildings and machinery have been added, and the monthly output has been raised from about 800 tons to 1400 tons. The gross receipts for the works rose from 87,000 lire in 1881 to 147,000 lire in 1882. Attention is now being particularly given to the production of puddled iron; special articles, such as rolled joist ("travetti"), are also being made, and a contract has been concluded with the Impresa Industriale Italiana di Costruzioni Metalliche di Turin, which, by ensuring a regular sale, enables the company to undertake the production of T, angle, and other iron bars of various qualities, which, up to the present time, had generally to be imported from abroad. The total number of hands employed at the works of San Giovanni is about 600. The hands employed are all Tuscans, many coming from the neighbourhood of Pistoia. The foremen at the furnaces are paid 7 lire per diem; the hands receive, on the descending scale, 5 lire, 3 lire, 2 lire, and boys 1 lira 50 c. per diem.

The works contain six heating furnaces, three puddling furnaces on the Siemens gas system, four rolling mills, &c. The engines set up at the works are from Stuttgart, with a total of 400-horse power. The iron driving-wheel, made at Treviso, is 6.50 metres in diameter. The rollers were constructed in England by Akkrill, of West Bromwich, the steam-hammers (three) by Massey, of Manchester. Old and broken iron is used for ordinary qualities of iron bars; for the finer kinds pig-iron, made from Elba ore, melted at Follonica, and by Messrs. Tardy, of Vada, is employed; English pig-iron from Middlesbrough is also used. The only difficulty in the way of the more extended use of English iron is the elevated railway tariff of 6 cents per kilom. and the difficulties of landing at Leghorn, so that the white pig-iron of Middlesbrough, which costs 62 lire on board at Leghorn, has to pay in addition, 9 lire 50 cents per ton for carriage to be delivered at San Giovanni.

Fuel is supplied by the lignite bed of Castelnuovo, which is connected with the works by a line of railway, a branch of the main line between Rome and Florence 7 kiloms. in length. The greater part, I believe about two-thirds of the whole basin, belongs to the company. Three years ago it was calculated that a total supply of 20,000,000 tons was available, which at an average production of 100,000 tons per annum would last for 200 years. The deposit of lignite is very deep, varying from 10 metres and 15 metres to 20 and 30 metres, and in some places to 40 metres. The total area of the bed has not yet been accurately ascertained; one cubic metre of lignite *in situ* yields about four-fifths of a ton of dry fuel, which, however, still contains from 15, if not from 18 to 20 per cent. of water. The lignite forms a light fuel, voluminous, and somewhat friable; but, on the other hand, the amount of ash is small, and it contains no sulphur. Its calorific power is equal to about one-half that of foreign coal. The company not only uses the lignite as fuel for its own works, but sells it to the public. The price of sale is 11 lire per ton, loaded on the wagons at the mine.

At Sita, in the Casentino, smaller ironworks exist, belonging to Messrs. Goretti and Miniat, at which some 40 or 50 hands are employed, but not continuously. The wages paid are from 2 to 3 lire per diem. The average annual importation of raw iron for the use of the works is 200 tons, and the production in bars, &c., is 150 tons. At San Giovanni many small nail factories are established, the products of which are sold in Tuscany. The most important is that of Messrs. Fabbri and Setti, which gives employment to about 60 hands, at wages varying from 1 lira 50 c. to 3 lire per diem, and supplies the principal houses in the trade, as well as the king's stables. The iron employed, both for the horse and other nails, is Swedish, and the manufacture is manual. According to the census of 1871 the number of nail and screw makers working in the province was 295, of whom one woman. The number of blacksmiths was noted at 927; workers in brass and copper, locksmiths, &c., at 145; and of tinsmiths and pewterers, at 63.

Works in manufactured iron are produced by various makers, but the workshops are all on a small scale. Messrs. Migliorini, of Arezzo, manufactures well-constructed safes; Signor Martini, also of Arezzo, makes locks, &c. The Italians in general are excellent workers in metal. Messrs. Bertolacchi and Battaglini's factory for agricultural machines and implements was founded at Arezzo in 1876 with three hands. Employment is now given to 70 hands, which shows a very satisfactory improvement in this branch of industry. The wages paid are from 2 lire to 2 lire 50 c. per diem. Branch houses have been established at Foiano, in the Val di Chiana, and at Castiglione Fiorentino. The principal articles produced are threshing machines, ploughs, wine and oil presses, &c. Mining and sporting powder are manufactured at Chitignano, in the Tiber valley, and in the neighbourhood of Arezzo. There are seven mills, the average annual production of which amounts to 2340 quintals, of the value of 305,000 lire; 50 hands are employed at wages, averaging from 1 lira 8 c. to 2 lire 70 c. per diem. In San Sepolcro there is a potash factory. The potash is obtained from the development of carbonic acid gas, produced by an acidulo-ferruginous spring, and is of excellent quality. The industry employs about 30 hands. Near the city of Arezzo, Messrs. Vannini Brothers have a small factory of white lead, bicarbonate of soda and potash, which gives work to some 12 hands.

A statistical enquiry into the condition of the industrial classes is now being carried on in Italy. The interest of the subject is undoubted; but from the variety of the conditions of the different families, even in the same locality, it is very difficult to obtain more than general impressions; the information produced can, therefore, be considered as approximate only. From the reports received from several manufacturers of the province of Arezzo, it would appear that the cost of living, for food only, for an adult male operative may be taken at about 5 lire 88 c. per week; for a woman at 3 lire 86 c.; for children less in proportion, the average rising or falling according to the rate of wages and local prices. The regular "merenda" or lunch is added. The meals are simple—in the morning bread, sometimes spread over with a little olive oil, occasionally accompanied by milk and coffee; at dinner bread, with sausage, salt fish, cheese, or fruit; in the evening soup, made with Italian pastes or vegetables, and an occasional piece of meat.

In general meat appears to be eaten only once a week, sometimes thrice, and in a few cases oftener. The average quantity of meat consumed by an adult male may be taken at 542 grammes per week. The bread eaten is generally of pure wheat flour, but occasionally mixed; the average consumption may be taken at a little above 6.6 kilos per week for an adult male. But it must be observed that where less meat is used the consumption of bread is greater, and *vice versa*. For women and children the average consumption is proportionally less. Potatoes, made of Indian corn, is also eaten as well as chestnut flour in the winter. Wine is drunk, but more plentifully by the men in the taverns than by the family at home, and the household supply is usually of a very light quality. The price of beef appears to vary between 1 lira 45 c. and 1 lira 65 c. per kilo.; of lamb and goat, between 75 cents, and 1 lira per kilo.; of wheat flour, from 27 cents, to 42 cents, the average being 33 cents per kilo.; while wine costs from 27 cents, to 60 cents, per litre, according to quality. Three or four of the principal manufacturers of the province have established stores for supplying their hands with wheat flour and wine, but the majority of the workpeople do not appear to resort to them, the facilities of credit granted by the village traders being often too great a temptation to be withstood.

The great desire of the ordinary operative is to secure a house, or even a room of his own, so that, in times of trouble, he would always be sure of having a roof over his head. It would be well if he were assisted in employing his savings in a direction which would tend to render him more generally provident. The total number of benefit societies existing in the province is 25, which, at the end of 1881, possessed a united capital of 173,899 lire, with 3905 effective and 382 honorary members. Their income in 1881 amounted to 41,276 lire, while their total expenditure did not exceed 24,174 lire. The societies are generally formed between artisans; one only includes by name agricultural labourers and metayers. They appear all to have been founded between 1861 and 1878, with the exception of that of the hatters, which dates from 1738. Of the total societies seven admit male members only, and 18 receive both male and female members. The minimum age for admission into the societies generally varies between 12 and 15, the maximum between 40 and 55 years. The entrance fee ranges between 1 lira and 15 lire; the annual subscription between 4 lire and 18 lire; the aid given per diem in time of sickness between 50 c. and 1 lire 50 c. In 1881, 741 members were in receipt of sick relief for a total period of 27,273 days, at an expenditure of 13,296 lire.

ANGLO-VENEZUELAN REVIEW.—The October number—the sixth—of this admirably printed circular, Messrs. De Rojas Brothers, favours their readers with a brilliant valedictory. La Opinion Nacional of Caracas having commenced to attack the Review and member of its editor's family, the timely withdrawal of one of the combatants cannot but be conducive to that tranquillity which every true Venezuelan so much desires.

RAILWAY COMPANIES DIRECTORY.—The forthcoming issue of this Directory for 1885, edited by Mr. Percy Lindley, will give the directors, officers, and agents of the railways of the United Kingdom, together with the capital subscribed, expended, and available, receipts and expenditure, dividends, and mileage, compiled from official sources.

OLD SHEPHERDS.—The plans of operation at this mine have been laid down with skill and carried out with rapidity; drained to the bottom (120 fms. from surface), necessary levels are being driven, leaving in the backs and bottoms of such drivages rich mineral reserves, and cross-cuts to the other lodes are being pushed forward. The result is greatly increased returns and the possession of a mine of wealth leading to early dividend, the demand for shares and a further considerable rise in their market value being fully warranted by the riches opening up.

GOLD AND SILVER.—Messrs. PILEY and ABELL (Oct. 2) write:—Gold: Since our last there has been more enquiry for gold, and all arrivals have been taken for export. The bank has lost 223,000, chiefly in sovereigns, which have been sent to Egypt. The only arrivals are 44,000, per Para, and a small parcel from the Cape. The P. and O. steamer has taken 7700, from Gibraltar, 195,000, to Egypt, and 70,000, to Bombay. Silver: Ex Para and Cotopaxi was sold at 19½d.; to-day, however, some has been purchased at 50½d. The chief amounts to hand are—20,000, from the West Indies, 45,000, from New York, 73,700, from Buenos Ayres, and 24,700, from Chili=181,400. 45,000, has gone this week to Bombay. Mexican dollars are quite nominal, and there are very few offerings. The imports are—102,300, from West India, and 4400, from New York. The quotations for bullion are—Bar gold, fine, 77s. 9d. per ounce, standard; bar gold containing 20 dwts. silver, 77s. 10½d. per ounce, standard; bar silver, fine, 50½d. per ounce, standard; bar silver containing 5 grs. gold, 51½d. per ounce, standard; cake silver, 54½d. per ounce; quicksilver, 5s. 10s. to 5s. 12s.; discount 3 per cent.

GAS SHARES.—The principal business in these shares, according to this evening's report of Messrs. W. L. WEBB and Co., of the Stock Exchange and Finch-lane, has been—Bahia (Limited) Ordinary, 25 to 25½; Bombay (Limited), 6½ to 7½; ditto, New 5½; British Gas Light (Limited), 43; Buenos Ayres, New (Limited), 13½ to 13¾; ditto, 6 per cent. Debentures, 1898, 106½ to 107; Cagliari Gas and Water (Limited), 22 to 22½; Commercial, 4½ per cent. Debentures Stock, 120½; Continental Union (Limited), Original, 37½ to 37¾; ditto, 7 per cent. Preference, 30½ to 31½; Gas Light and Coke, A. Ordinary, 223 to 224½; ditto, C. D. and E. 10 per cent. pref., 239 to 239½; ditto, G. 7½ to 16½; ditto, H. 7 per cent. Maximum, 152; ditto, 4 per cent. Debentures Stock, 110½; ditto, 6 per cent. ditto, 162; Imperial Continental, 206½ to 207½; Oriental, New 7½; Para (Limited), 5½; Rio de Janeiro (Limited), 22½ to 23½; South Metropolitan, B. 220½ to 221; Monte Video (Limited), 17½ to 17¾. Gas stocks firm, but little doing. Buenos Ayres easier, upon news of floods which stopped the lighting for a day.

INSURANCE SHARES have, according to this evening's report of Messrs. W. L. WEBB and Co., of the Stock Exchange and Finch-lane, been dealt in as follows:—Alliance British and Foreign, 37½ to 38; City of London Fire (Limited), ½ to ½; City of London Marine Insurance Corporation (Limited), ½; Imperial Fire, 153 to 154½; Indemnity Marine, 14½; Liverpool, London, and Globe Fire and Life, 24½; London, 50½ to 50¾; London and Provincial Marine (Limited), 4½; Marine (Limited), 27; North British and Mercantile, 26½; Ocean Marine (Limited), 5½; Railway Passengers, 7½; Royal Insurance, 28½ to 28¾. Insurance little doing.

TRAMWAYS.—The closing prices of this evening, as quoted by Mr. W. M. ABBOTT, of Tokenhouse-yard, are given in tabular form in the last page of the Journal.

LEAD ORES.					
Date.	Mines.	Tons.	Price per ton.	Purchasers.	
Oct. 2—	Great Holway	22	8 15 6	Walker, Parker, & Co.	

BLENDE.					
Date.	Mines.	Tons.	Price per ton.	Purchasers.	
Sept. 22—	Frongoch	100	£ 2 8 6	Vivian and Sons.	
30—	ditto	50	2 11 0	J. F. Kimmel.	
—	ditto	50	2 2 0	Dillwyn and Co.	
—	Great Holway	40	3 12 0	ditto	
—	Carmysty	120	2 13 0	J. F. Kimmel.	
Oct. 1—	Pierrefitte	60	3 5 6	Villiers Spelter Co.	

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## INTERNATIONAL INVENTIONS EXHIBITION

LONDON, 1885.

DIVISION I.—INVENTIONS. DIVISION II.—MUSIC.

PATRON.

HER MAJESTY THE QUEEN.

PRESIDENT.

H.R.H. THE PRINCE OF WALES, K.G.

Applications to exhibit must be made on printed forms, which will be supplied on application to the Secretary, International Inventions Exhibition, South Kensington, S.W.

These must be filled up and returned on or before the 1st Nov., 1884.

## LE MOUVEMENT INDUSTRIEL BELGE.

REVUE TECHNIQUE, COMMERCIALE, ET FINANCIERE, sous la direction de Mr. l'ingénieur P. DESGUIN. Paraît le 4 Juillet, 1884, et successivement les Vendredis de chaque semaine. Il contiendra des articles d'actualité sur l'agriculture, la navigation, les mines, la construction, les machines, les chemins-de-fer, les canaux, les travaux publics, le droit industriel et commercial, les inventions, et les perfectionnements, et principalement sur l'Exposition Internationale d'Anvers, dont il publiera les plans, les dessins, et documents de tous genres.

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A 9 H.P. VERTICAL STEAM ENGINE, with link motion reversing gear (winding drum if required).

A 6 ft. pan MORTAR MILL, VERTICAL ENGINE, and BOILER combined, on carriage and travelling wheels.

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TWO GOOD WINDING ENGINES, each with cylinder 15½ in. diameter, 2 ft. 7 in. stroke, with drums, brake, and reversing gear.

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ONE STEAM SHEARING MACHINE, with cylinder 8 in. diameter, 8 in. stroke, to cut bars up to 3 in. x 2 in. at 20 strokes per minute.

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WANTED, FIVE HUNDRED SHARES, or any less number.—State lowest price and full particulars, by letter, to THOMAS WILLIAMS, 110, Cannon-street, London, E.C.

## DIAMOND BORING.

WANTED, a MAN thoroughly competent to TAKE CHARGE of DEEP BORING OPERATIONS in Spain. One who can set diamonds preferred. State experience and wages expected. Address, "D. B. 157," Messrs. Deacon's, Leadenhall-street, London.

WANTED, a SITUATION by a young Mechanical and Mining Engineer; two years at the School of Mines at Freiberg; three years' experience as Assistant in a large Mine in Spain; practical Surveyor and Analyst; corresponds and speaks fluently French, Spanish, and German, acquired abroad; excellent certificates and references. Address, "St. Inst. C. E.," care of R. MEDLEY, Ventnor, Isle of Wight.

## MINING CAPTAIN WANTED for the Continent having

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WANTED, a FEW CAPITALISTS to join in SECURING some very valuable GOLD MINING and LAND PROPERTIES, from which large profits can be made.

For particulars apply to THOMAS CORNISH, M.E., care of MINING JOURNAL Office, 26, Fleet-street, E.C.

AGENTS WANTED TO PUSH FIRST-CLASS MACHINERY OILS commanding a large and successful sale. Liberal commission.

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## WILLIAM ELMORE (LIMITED).

OFFERS WANTED for TWO, FOUR, or SIX DEBENTURES of £50 each. For prospectus of the company, see Mining Journal of May 26, 1883. No reasonable offer will be refused. Money wanted. Address, "Dynamo," MINING JOURNAL Office, 26, Fleet-street, London, E.C.



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**LARGE BELL, PUSH, 50 YARDS INSULATED WIRE, and BATTERY** complete on receipt of 25s. Suitable for easily communicating between distances.

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Inspects, Values, and Reports on Collieries, Mines, and Mineral Properties, and advises on all Mining matters, and the construction and erection of Mining Machinery.

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**ALEX DEL MAR,**  
Mining Engineer, late Director of the United States Bureau of Statistics,  
Mining Commissioner for the United States Monetary Commission,  
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United States Mineral Surveyor for Utah and Idaho, Notary Public, Geological Examinations, Reports on Mining Properties; Surveys Mines, Railroads, and Canals, and Superintends the Workings of the same. Prepares Estimates and Plans for Opening and Working Mines. Expert on Mining Questions before the Courts.  
Address, P. O. Box, 1157, Salt Lake City, Utah.

**JOHN ROBERTSON, F.S.A., MINING AND CONSULTING ENGINEER, LAS VEGAS, NEW MEXICO.**  
Mines and Mining Claims carefully examined, Assays made of their Ores, and reliable Reports furnished.  
Mining Properties bought and sold on commission. Has special facilities for inspecting properties in Mexico.  
References by permission:—L. P. BROWNE, Esq., Las Vegas, New Mexico; Don P. A. MANZANARES, Las Vegas, New Mexico; His Excellency H. M. HOTT, Esq., Governor of Pennsylvania, Harrisburg, Pa.; H. S. PIERCE, Esq., Banker, Scranton, Pa.; Hon. JOHN HANDLEY, President Judge 45th Judicial District, Scranton, Pa.; N. H. SHAFER, Esq., Cashier Third National Bank, Scranton, Pa.; E. B. STURGES, Esq., Attorney-at-Law, Scranton, Pa.; E. W. WESTON, Esq., General Agent Delaware and Hudson Canal Company, Providence, Pa.; Hon. Sir JOHN P. CLARKE, Baronet, Tiltshire, Aberdeenshire, Scotland; R. L. CHANCE, Esq., Birmingham, England; JOSEPH ROBERTSON, Esq., 17, Tokenhouse-yard, London.

**THOMAS CORNISH, CONSULTING MINING ENGINEER.**  
Mines Inspected and Reported on. Advice on Mining Management and Investment.  
Twenty-five years' practical experience in Australia.  
Author of "Gold Mining: its Results and its Requirements"—"Our Gold Supply: its Effects on Finance, Trade, Commerce, and Industries"—"A Trip to Colorado," &c.  
Address, care of MINING JOURNAL Office, 25, Fleet-street, London, E.C.

**ALEXANDER SMITH, MInst. C.E., CONSULTING ENGINEER AND VALUER OF IRONWORKS, MINING, RAILWAY, ENGINEERING, AND OTHER PROPERTY, PLANT, AND MACHINERY,**  
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Valuations for Stock Taking or any other purpose upon very reasonable terms.

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**WILLIAM NICHOLAS, F.G.S.,**  
Lecturer on Mining, University, Melbourne, Consulting Mining Engineer, Exchange, Melbourne, Victoria, Australia.

**MINE "EL CUALLO,"**  
GUAYANA, VENEZUELA.  
32,200 SHARES.

Gold in bars produced in the month of August, 1884, and remitted to Messrs. Baring Brothers and Co., London—15,594.12 ozs.  
DIVIDEND distributed per Share, 28 francs.  
(Signed) A. LICCIONI, President.  
(Signed) VICTOR J. GRILLET, Treasurer.

**THE CANADA PACIFIC IRON AND STEEL RAIL COMPANY.**  
The Subscriber is desirous of opening communication with some party in England for the purpose of organising the above company. One thousand acres of red hematite ore not far from the line of the C.P.R.  
Address, HUBERT C. JONES, Solicitor, Brockville, Ontario, Canada.

**METALLURGICAL DEPARTMENT, KING'S COLLEGE, LONDON.**

Under the direction of Prof. A. K. HUNTINGTON.  
In the Laboratory, Metals and Alloys are examined mechanically with the aid of powerful Testing Machinery, as well as chemically. Extraction and manufacturing processes investigated, and assays and analyses made.

A FEW FREE ENTRIES to the division of studies (day or evening) are obtainable through the City and Guilds Institute.

**In the High Court of Justice—Chancery Division.**  
Mr. JUSTICE CHITTY.

**GLAMORGANSHIRE.**  
**IMPORTANT SALE OF FREEHOLD SURFACE AND MINERAL PROPERTY.**

THE MIERS ESTATE, in the parishes of Cadoston-Juxta-Neath and Liangw, otherwise Lianguick, consisting of the manors of Killybell and Neath Ultra, and Caeurwen, together with about 8265A. On 37p. of arabic, pasture, and common land, several rich veins of the coal and other minerals for which the South Wales coal field is celebrated, with valuable collieries in active operation, and connected with the Midland and Great Western Railway systems. The surface is divided into farms of convenient extent, with suitable buildings, some of which are situated at the top of the Vale of Neath, far-famed for its beautiful scenery, TO BE SOLD BY AUCTION, BY

MESSRS. STEPHENSON AND ALEXANDER, the Auctioneers appointed with the approval of Mr. JUSTICE CHITTY, the Judge to hold Court this cause is attached, at the Angel Hotel, Cardiff, on TUESDAY, the 14th October next, at Two P.M.  
Fuller particulars may be obtained from Messrs. TALBOT and TASKER, solicitors, 47, Bedford-row, London; Messrs. GRIFFITH and CORBETT, solicitors, Cardiff; Messrs. TORR, JANEWAYS, and Co., solicitors, 38, Bedford-row, London; Messrs. UPTON, ATKY, and UPTON, solicitors, 14, Austin Friars, London, E.C.; Messrs. PITCHARD, ENGLEFIELD, and Co., solicitors, Painters' Hall, Little Trinity-lane, London, E.C.; Mr. J. O. JONES, Mining Engineer, 34, Wise-street, Swansea; Mr. JAMES KEMPTHORNE, solicitor, Neath; Mr. D. REES, Cardiff-street, Aberdare; or of the Auctioneers, at Cardiff; and at the place of sale.

**In the High Court of Justice.**

**ABERDUNA LEAD MINES (LIMITED).**

THE LIQUIDATOR is prepared to RECEIVE TENDERS for the PURCHASE of the MINING RIGHTS, extending over about 150 acres, situated in the parish of Llanferres, in the county of Denbigh, close to good roads, and within easy access to Mold Station on the London and North-Western Railway, together with the

**MACHINERY, PLANT, TOOLS, AND EFFECTS.**

The mine is thoroughly equipped. Engine-shaft sunk to 125 yards. Best discovery of lead made at last level driven out from the shaft at the depth indicated.

Tenders will be received by Mr. WILLIAM THEOBALD, the Official Liquidator, on or before Twelve o'clock on Monday, the 27th October, 1884, at the offices of Messrs. THEOBALD BROTHERS and MIAL, F.C.A., 27, St. Swithin's-lane, London, E.C.

Applications for Orders of Inspection of the Mines and Forms of Tender may be obtained of the Official Liquidator; and particulars and conditions of sale may be had of R. CHANDLER, Esq., Solicitor, 66, Bishopsgate-street Within, E.C.; Mr. RUPERT PRINCE, at the Mines, Mold; or of the Liquidator, WILLIAM THEOBALD, Esq. (Theobald Brothers and Mial), Chartered Accountant, 23, St. Swithin's-lane, London, E.C.

**TUESDAY, OCTOBER 21st, 1884, NOON.**

**VERY VALUABLE MINE MACHINERY, PLANT, AND MATERIALS FOR SALE.**

At NORTH PENSTREUTHAL MINE, in the parish of Gwynedd, near Llaner, about one mile from Redruth, Cornwall.

MR. W. T. DAVEY, Auctioneer, Redruth, has been favoured with instructions TO SELL, BY PUBLIC AUCTION, on TUESDAY, October 21st next, at Twelve o'clock, at the above Mine, the WHOLE of the FIRST-CLASS

**MACHINERY, PLANT, AND MATERIALS**

THEORETICALLY, COMPRISING:—

ONE good 50 in. cylinder CORNISH PUMPING ENGINE, equal beam, 10 ft. stroke, with first piece of main rod; two excellent Cornish boilers, with fittings, 12 tons and 16 tons respectively.

ONE 23 in. cylinder horizontal WINDING ENGINE, 5 ft. stroke (crank shaft and fly wheel), air pump and condenser, nearly new, by Harvey and Co., with extended bed plate, and 18 in. air compressor, cylinder 6 ft. stroke; one new 18 in. air cylinder, 6 ft. stroke, to replace present one; one 10 ton Cornish boiler and fittings.

ONE 31 in. cylinder STAMPING ENGINE, equal beam, 9 ft. stroke, with two excellent fly wheels, and one 10 ton Cornish boiler and fittings; two nearly new stamps axes (32 heads), with cams, braces, &c., complete; ten round buddies, with driving gear, shafts, stays, &c.; two excellent air receivers, about 8 tons; dry tube, &c., about 3 tons; about 300 fms. of 3 in. iron air pipes, with faced flanges; one double power winch; one 4 ton boiler; three 3½ in. rock boring machine drills, three stretcher bars, with clamps; one 60 ft. shears, with sheaves; three balance bobs; shaft tackle, &c.; 160 fms. rods, 12 to 7 in.; 60 fms. superior flat rods, with travelling wheels, &c., complete; 270 fms. of pitwork of various sizes, from 7 to 12 in., including H and door pieces and poles; 250 fms. 3 in. circular steel wire rope; 30 fms. of 1½ in. iron bucket rods; 250 fms. iron stave ladders; 100 fms. ladders, various sizes; a quantity of staples and glands; faggoted and hammered rod plates; chain; railroad iron; smith and miners' tools; new steel and iron; wood sheds; casing planks; useful timber and other materials in general use in mines; account house furniture and other effects.

The foregoing machinery, plant, and materials will be first offered in One Lot, and if not sold will immediately be put up in Lots to suit the convenience of purchasers.

The machinery and materials will be found in first-class working condition, and up to the standard of the engines, boilers, &c., were maintained in thoroughly efficient working order.

The engines were regularly indicated by Messrs. Hooking and Son, and presented very good indicator diagrams.

**REFRESHMENTS WILL BE PROVIDED.**

To view, apply to the Agents on the Mine; and for further particulars to Mr. E. ASHMEAD, the Secretary, 2, Drapers' Gardens, London; or to the Auctioneer, 4, Station Hill, Redruth.—1st October, 1884.

**IN LIQUIDATION.**

**NEAR TREPRIW AND BETTWY-COED, COUNTY OF CARMARVON.**  
**THE GWYDYR AMALGAMATED MINES COMPANY (LIMITED).**  
TO MINING PROPRIETORS, IRON MERCHANTS, AND OTHERS.

MESSRS. W. M. DEW AND SON are instructed by the Liquidator of the above to SELL, BY PUBLIC AUCTION, on WEDNESDAY, the 8th day of October, 1884, the WHOLE of the

**MINING PLANT AND MACHINERY, viz:—**

**AT ABERLLEYN MINE.**

A 30 ft. diameter water wheel, 4 ft. breast; a 12 ft. ditto, 2 ft. breast; a 14 in. Blake's patent stone crusher; two sets of large and one small automatic jiggers; a 5 ft. incline drum, with 70 fms. of 1 in. diameter wire rope; 240 fms. of tram road, and four tram waggon; smith's bellows, vice, tools, corrugated iron roofing, &c.

**AT CLEMENTINA MINE.**

A water wheel, 60 ft. diameter, 2 ft. breast; ditto, 18 ft. diameter, 3 ft. breast; 124 fms. of 1½ in. iron rods, iron sweep rod with brasses, heavy three and two arm bobs, drawing lifts, 44 fms. of 8 in. drawing lifts, 140 fms. ¾ in. diameter wire rope; one winding drum, 3 ft. diameter; one 22 in. patent double blast bellows; 200 ft. tools, stocks and dies, corrugated iron roof, crab winch, screw jack, &c. &c. furniture, &c.

Sale to commence at Aberllyn Mine at Eleven A.M.

The whole of the Plant at each Mine will be offered in the first instance in One Lot, and if not sold then in separate Lots as per catalogue.

Breaks will meet the 9.2 A.M. train at Llanrwst Station to convey intending purchasers.

Catalogues may be had at any of the Hotels in the district; of the Liquidator, Mr. EDWARD ASHMEAD, F.C.A., 2, Drapers' Gardens, London, E.C.; Messrs. STACPOOLE and Son, Solicitors, Pinner's Hall, Old Broad-street, London; and of the Auctioneers, Bangor, Rhyl, and Denbigh.

**TOWNSHIP OF GWYDYR, NEAR LLANRWST, NORTH WALES.**  
**THE DERESBY MOUNTAIN MINING COMPANY (LIMITED).**

**IN LIQUIDATION.**

MR. F. M. WHITTINGHAM WILL SELL, by order of the Liquidator, BY PUBLIC AUCTION, at the Guildhall Tavern, Gresham-street, London, on THURSDAY, the 16th day of October, 1884, at Two o'clock P.M., precisely, according to the conditions of sale to be produced at time and place of sale, the WHOLE of the

**MACHINERY AND MATERIALS**

Belonging to the D'Erresby Mountain Mining Company (Limited), together with the LEGAL and EQUITABLE INTEREST in the LEASE on which the mine belonging to this company is worked, AS A GOING CONCERN.

There will be included in the sale one 10 horse power semi-portable steam engine, with pumping and winding gear; winding drum; one 30 ft. diameter water wheel; one portable engine for drawing; one Cornish crusher; one Blake's stone breaker; two sets of self-acting jiggers; tram waggon; kibbles; 70 fms. of ¾ in. diameter steel wire rope; pumps; rods; and all other machinery and materials belonging to the company; including a variety of useful materials for the continued working of the mine.

Held under lease from the Baroness Willoughby D'Erresby, from Nov. 30, 1877, for 21 years, at an annual rent of £105 per annum, or a royalty of 1-12th on ores raised, and an additional charge of £5 for use of reservoir.

For further particulars apply to the Liquidator, Mr. EDWARD ASHMEAD, F.C.A., 2, Drapers' Gardens, London; Messrs. STACPOOLE and Son, Solicitors, 2, Pinner's Hall, Old Broad-street, London; Capt. JOHN ROBERTS, Bryn Crafant, Trefriw, North Wales; and of the Auctioneer, Mr. F. M. WHITTINGHAM, 5, Bishopsgate-street Within, London.

**FOR SALE, at BRENDON HILLS MINES:—**

ONE 25 inch cylinder PUMPING and WINDING ENGINE, stroke 9 feet, with fly wheel, winding gear attached, with one 12 ton boiler.  
Also ONE 25 inch cylinder PUMPING and WINDING ENGINE, stroke 9 feet by 7, with fly wheel, winding gear attached, with one 10 ton boiler fitted with Galloway tubes.

Any further information may be obtained from Capt. HENRY SKELVIS, Brendon Hills Mines, Washford, Taunton.—Dated March 12, 1884.

**IN LIQUIDATION.**

**THE MWYNDY IRON ORE COMPANY.**

**SALE OF THE FREEHOLD AND LEASEHOLD PROPERTIES, VALUABLE PLANT, MACHINERY, SIDINGS, AND RAILWAY TRUCKS.**  
MESSRS. STEPHENSON AND ALEXANDER are instructed by the Liquidator TO SELL, BY AUCTION, at the Royal Hotel, Cardiff, on SATURDAY, the 25th day of October, 1884, at Half-past Three o'clock P.M., the following valuable

**FREEHOLD AND LEASEHOLD HEMATITE IRON ORE MINES,**

With the POWERFUL ENGINES, and other fixed and movable plant, railway sidings, and materials, together with 90 RAILWAY WAGONS.

LOT 1.—THE MWYNDY HEMATITE IRON ORE MINES, which are freehold, and containing about 70 acres or thereabouts, with the powerful pumping and drawing engines, fixed and movable plant, smith's and other workshops, saw mills, under manager's house, and five cottages, railway siding, and other appliances necessary for the equipment of a large undertaking; also the leasehold properties, known as Liwynaser, with the pumping and winding engines and other plant; also the valuable BUTE MINES, which are leasehold, adjoining the above, containing about 80 acres or thereabouts, the whole of these being in working order, and which will be offered as a going concern.

The mines have produced in recent years a large annual output of hematite iron ore of excellent quality, and there is a large quantity of ore already won, which could be raised at a very low cost per ton.

The Liwynaser Mines are held under lease for a term, of which 48 years were unexpired on 30th June, 1884.

The Butte Mines are held under agreement for lease for the term of 21 years, from 25th December, 1882.

LOT 2.—THE VALUABLE HEMATITE IRON ORE MINE, known as Treacly, near Llantrisant, with the valuable pumping and other engines, fixed and movable plant, railway sidings, &c.

This will also be offered as a going concern. The property is leasehold, containing about 520 acres or thereabouts, held for a term of which 29 years will be unexpired on 1st January, 1885.

These mines have produced during the last three years a large annual output of hematite iron ore, showing by analysis a large percentage of iron, and great freedom from injurious ingredients, and suitable for the manufacture of all kinds of iron and steel. There is a very large area of unworked mineral on the property, and a considerable quantity already won by existing workings.

Further particulars of these important lots and plans and particulars and conditions of sale may be obtained upon application to Messrs. LYNE and HOLMES, Solicitors, 5 and 6, Great Winchester-street, London, E.C.; Messrs. R. MACARTNEY and Co., 3, Lothbury, London; or to Messrs. STEPHENSON and ALEXANDER, Auctioneers, 5, High-street, Cardiff.

**GLAMORGANSHIRE.**

**SALE OF THE BITUMINOUS COAL MINES**

KNOWN AS THE

**AVAN HILL COLLIERY.**

Abergywnyl, on the Abergywnyl Branch of the Great Western Railway, with the machinery for making the very best first-class fire bricks.

MESSRS. STEPHENSON AND ALEXANDER have been instructed by the Avan Hill Colliery Company TO SELL, BY AUCTION, on TUESDAY, the 28th day of October, 1884, at the Royal Hotel, Cardiff, at Three o'clock in the afternoon, the foregoing valuable COLLIERY PROPERTY, known as the AVAN HILL COLLIERY, Abergywnyl Valley, Glamorganshire, within easy reach of the shipping ports of Cardiff, Porthcawl, Port Talbot, Briton Ferry, Swansea, and adjacent to the Great Western Railway, with which it is connected by suitable and commodious sidings.

The area of the minerals is about 575 acres, and the section of the seam being worked averages about 4 ft. in thickness over the whole property.

The workings, which are carried on through levels, have been worked for about four years, the present output being equal to about 800 tons per week, which with a small outlay can be increased to over 200 tons per day within two months.

The royalties are of an exceptionally low figure, being only 6d. per ton of 2500 lbs., and 3d. per ton for fire clay and building stone.

The property was taken in 1883 for a term of 60 years, of which nearly 40 years are still unexpired, owing to which the terms of the lease are exceptionally favourable.

The coal is well known in the market, and commands good prices. The seam now being worked is attained through levels, and is water and gas free; a good rock roof overlies the whole of the seam. In addition to the coal measures there is an excellent seam of fire clay, about 5 ft. thick, underneath the whole of the property, and workable by level.

The machinery, comprising a 14 in. single cylinder horizontal hauling engine, with ropes and drums and boiler complete, brick making machinery of the most modern construction, and other plant and materials, horses, sidings, smith and carpenter's shop, stabling, &c.

The Rhonda and Swansea Bay Railway, now in course of construction, passes within ¼ mile of the property, and brings the colliery within 11 miles of port, the tolls upon which to Port Talbot, Briton Ferry, and Swansea will be unusually low.

The South Wales Mineral Railway has a junction with the Great Western Railway system at a distance of 3 miles from the property.

For further particulars apply to the Auctioneers, or to Mr. D. B. EVANS, Avan Hill Colliery, Abergywnyl, near Bridgend.

**TO OIL AND CHEMICAL MANUFACTURERS.**

**IMPORTANT SALE OF VALUABLE FREEHOLD PROPERTY**

Belonging to the Flintshire Oil and Cannel Company (Limited), comprising the extensive premises known as ST. DAVID'S OIL WORKS, situated at Salsley, near Chester, with managing director's and manager's houses, buildings, and erections, and upwards of 15 acres of freehold land, together with the whole of the extremely valuable plant, machinery, goodwill, and stock-in-trade, as a going concern; also a desirable FREEHOLD ESTATE at Tryddyn, near Mold, comprising a handsome residence, known as Tryddyn Lodge, with ample outbuildings, gardens, &c., farm-house and buildings, numerous cottages, and 87A. 2m. 51p. of land, including the premises known as the Tryddyn Lodge and Farm Collieries, together with the valuable plant and machinery thereon, and the minerals underlying the same.

MESSRS. CHURTON, ELPHICK, AND CO. have received instructions TO SELL BY AUCTION, at the Grosvenor Hotel, Chester, on SATURDAY, the 25th day of October, 1884, the above-mentioned valuable FREEHOLD PROPERTIES.

N.B.—Particulars, with plans, will shortly be published. Any further information may be had from Mr. J. TATLOCK, Solicitor to the Company, or the Auctioneers, all of Chester.

**CWMFRRYF MINE.**

Situate in the Rhedol Valley, seven miles distant from Aberystwyth.

**TO BE SOLD, BY AUCTION, at the above-named Mine, on TUESDAY, 7th October, 1884, the WHOLE of the VALUABLE and MODERN**

**PLANT AND MACHINERY, consisting of:—**  
A 40 ft. diameter by 4 ft. 6 in. breast water wheel, with pit frame and holding down bolts; 30 in. diameter crushing mill, with levers, balance box, intermediate gearing, and wrought iron raft wheel, 18 ft. diameter; two round buddies, with 2 ft. 6 in. diameter cast iron centre pieces revolving plates; clean water apparatus; wood flooring; strong top frame and driving gear; large quantity of wooden covered ladders, well bolted together; several tons of bridge rails, 10 or 14 lbs. to the yard, and wood sleepers for ditto; tram waggon; wheel barrow; hand barrow; shovels; picks; miners' tools; smith's bellows; anvil, vice, and other tools; one crab winch; scales and weights; and several other sundry articles.

The whole of the above are nearly equal to new.

Sale to commence at Twelve noon.

Further particulars to be obtained of Mr. GRIFFITH WILLIAMS, Timber Merchant; or Mr. THOMAS WILLIAMS, Rhedol Foundry; both of Aberystwyth.

**TO LANDED PROPRIETORS, ESTATE AGENTS, SOLICITORS, AND OTHERS.**

**SURVEYS and PLANS of ESTATES, large or small, made at a fixed charge of One Shilling per acre anywhere in the kingdom.**  
Address, T. G. ALDERSON, Land Surveyor, 10, Queen's Grove, Nottingham.

**MICHELL AND TREGONING'S PATENT PULVERISER.**

F. BARTLE AND CO., of BASSETT FOUNDRY, CARN BREA, have much pleasure in announcing that they have become the PURCHASERS of an UNDIVIDED MOIETY of the ABOVE PATENT; and are, therefore, in a position to SUPPLY this FIRST-CLASS PULVERISER direct from their own Works at the shortest notice, and of guaranteed workmanship.

This Pulveriser has won several Medals, and has an unrivalled and increasing reputation for durability, cheapness, and dispatch.

Further particulars on application.

All descriptions of Mining Machinery for home and foreign parts Faggotting, Smithery, and Fitting in all its Branches.

**DEPRESSION versus ECONOMY.**

**LET ALL STEAM USERS COVER THEIR BOILERS AND STEAM PIPES WITH**

**TANNIC CEMENT,**

And save 15 per cent. to 75 per cent. (according to situation of boiler and length of pipes) of their expenditure on Fuel.

For prices and full particulars of this New Patent Non-conducting Composition, write to the Manufacturers,—

**DAVID BURNS AND CO., Engineers,**

10, BANK STREET, CARLISLE

AGENTS WANTED.



# NOBEL'S DYNAMITE



Manufactured and sold by  
**NOBEL'S EXPLOSIVES COMPANY, LIMITED**  
(FORMERLY THE BRITISH DYNAMITE COMPANY LIMITED),  
Head Office: 149, West George Street, Glasgow.  
EXPORT AGENTS: JAMES THORNE AND CO., 85, GRACECHURCH STREET, LONDON, E.C.  
Factories—ARDEER WORKS, STEVENSTON, Ayrshire.  
WESTQUARTER WORKS, POLMONT STATION, STIRLINGSHIRE.  
REDDING MOOR WORKS, POLMONT STATION, STIRLINGSHIRE.

Supplies may be obtained from any of the following District Agents of the Company in Great Britain:—  
HENRY KITCHIN and CO., 46, Lowther-street, Whitehaven.  
J. H. EDWARDS, Forth House, Newcastle-on-Tyne.  
JAMES M. ARMSTRONG and CO., Middlesbrough-on-Tees.  
ALBERT RICKETTS, Dean-lane, Bedminster, Bristol.  
E. READ, Reforme, Portland, Dorsetshire.  
LEIGH and SILLAVAN, Barton House, 56, Deansgate, Manchester.  
GEORGE ROBERTS George-street, Gloucester.  
J. H. BEAN and CO., 6, Albion-street, Leeds.  
Wm. RICH and SONS, 4, Basset-street, Redruth, Cornwall.  
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## THE MINING SHARE LIST.

## BRITISH DIVIDEND MINES.

Shares.	Paid.	Last wk.	Clos. pr.	Total divs.	Per sh.	Last pd.
Bedford Unit, s. e. Tavis. (21 sh.)	0 14 0	15 1/2	15 1/2	0 1 0	0 1 0	May 1914
12000 Barn Bros. s. e. Tavis. (21 sh.)	13 2 11	15 1/2	15 1/2	0 1 0	0 1 0	Nov. 1913
4000 Cragmant Bach, s. e. Tavis. (21 sh.)	5 0 0	15 1/2	15 1/2	0 1 0	0 1 0	Nov. 1913
10240 Devon St. Consols, s. e. Tavis. (21 sh.)	1 0 0	3 1/2	3 1/2	118 7 0	0 0 0	Dec. 1913
4700 Dolcoath, s. e. Tavis. (21 sh.)	10 14 10	73 1/2	72 1/2	39 16 2	1 10 0	Aug. 1914
6400 East Pool, s. e. Tavis. (21 sh.)	0 8 9	41 1/2	40 1/2	40 15 6	1 0 0	Aug. 1914
12000 Great Holway, s. e. Tavis. (21 sh.)	5 0 0	15 1/2	15 1/2	0 1 0	0 1 0	Sept. 1913
15000 Great Laxey, s. e. Tavis. (21 sh.)	4 0 0	9 1/2	9 1/2	30 3 0	0 0 0	May 1914
4000 Green Hurth, s. e. Tavis. (21 sh.)	0 6 0	15 1/2	15 1/2	0 1 0	0 1 0	July 1914
9500 Gunlake (Chiltham), s. e. Tavis. (21 sh.)	2 2 0	15 1/2	15 1/2	0 1 0	0 1 0	Mar. 1913
12000 Gunlake (Chiltham), s. e. Tavis. (21 sh.)	25 0 0	15 1/2	15 1/2	0 1 0	0 1 0	Nov. 1913
20000 Isle of Man, s. e. Tavis. (21 sh.)	4 8 0	15 1/2	15 1/2	0 1 0	0 1 0	Sept. 1914
20000 Leadhills, s. e. Tavis. (21 sh.)	6 0 0	15 1/2	15 1/2	0 1 0	0 1 0	Sept. 1914
4000 Libburn, s. e. Tavis. (21 sh.)	15 15 0	15 1/2	15 1/2	0 1 0	0 1 0	Aug. 1914
10000 Mellanear, s. e. Tavis. (21 sh.)	2 6 0	1 1/2	1 1/2	2 4 0	0 0 0	Jan. 1914
9000 Minera Mining Co., s. e. Tavis. (21 sh.)	5 0 0	7 1/2	7 1/2	69 14 2	0 2 0	Aug. 1914
20000 Mining Co. of Ireland, s. e. Tavis. (21 sh.)	7 0 0	15 1/2	15 1/2	24 0 0	0 2 0	Jan. 1914
11229 North Hendre, s. e. Tavis. (21 sh.)	2 10 0	1 1/2	1 1/2	3 18 0	0 4 0	Nov. 1913
8146 Ditto, s. e. Tavis. (21 sh.)	1 6 0	1 1/2	1 1/2	17 7 0	0 2 0	Nov. 1913
12000 Phoenix United, s. e. Tavis. (21 sh.)	7 10 0	2 1/2	2 1/2	13 13 0	0 2 0	Sept. 1913
12000 Roman Gravel, s. e. Tavis. (21 sh.)	7 10 0	2 1/2	2 1/2	11 8 0	0 7 0	Aug. 1914
6123 South Down, s. e. Tavis. (21 sh.)	1 10 0	2 1/2	2 1/2	2 4 0	0 2 0	Apr. 1914
9000 South Durran, s. e. Tavis. (21 sh.)	1 10 0	2 1/2	2 1/2	51 3 0	0 6 0	Dec. 1913
6000 Tincroft, s. e. Tavis. (21 sh.)	14 2 6	8 1/2	7 1/2	25 13 0	0 2 0	Jan. 1913
15000 Van, s. e. Tavis. (21 sh.)	4 5 0	1 1/2	1 1/2	28 3 0	0 8 0	Apr. 1914
6000 West Basset, s. e. Tavis. (21 sh.)	7 10 0	2 1/2	2 1/2	11 8 0	0 7 0	Aug. 1914
6000 West Killy, s. e. Tavis. (21 sh.)	5 12 0	10 1/2	10 1/2	3 1 0	0 12 0	July 1914
6000 Wheel & Axle, s. e. Tavis. (21 sh.)	19 6 0	18 1/2	18 1/2	1 1 0	0 1 0	Sept. 1914
12000 Wheel & Axle, s. e. Tavis. (21 sh.)	2 4 0	1 1/2	1 1/2	1 1 0	0 2 0	Nov. 1913
1024 Wheel & Axle, s. e. Tavis. (21 sh.)	18 0 0	1 1/2	1 1/2	59 0 0	1 0 0	Nov. 1913
6000 Wheel & Axle, s. e. Tavis. (21 sh.)	15 0 0	6 1/2	6 1/2	2 2 0	0 2 0	Sept. 1914
4295 Wheel & Axle, s. e. Tavis. (21 sh.)	5 12 0	6 1/2	6 1/2	12 18 0	0 1 0	Jan. 1914
3000 Wheel & Axle, s. e. Tavis. (21 sh.)	14 9 6	3 1/2	3 1/2	8 13 0	0 4 0	Mar. 1913

## FOREIGN DIVIDEND MINES.

Shares.	Paid.	Last wk.	Clos. pr.	Total divs.	Per sh.	Last pd.
35500 Almaden, s. e. Tavis. (21 sh.)	2 0 0	15 1/2	15 1/2	2 18 0	0 1 0	Sept. 1914
30000 Almaden, s. e. Tavis. (21 sh.)	1 0 0	15 1/2	15 1/2	0 8 0	0 1 0	May 1914
20000 Australian, s. e. Tavis. (21 sh.)	7 7 8	2 1/2	2 1/2	1 11 0	0 1 0	July 1914
15000 Birdseye Creek, s. e. Tavis. (21 sh.)	4 0 0	3 1/2	3 1/2	1 7 0	0 2 0	June 1914
30000 Bratsberg, s. e. Tavis. (21 sh.)	2 0 0	15 1/2	15 1/2	0 4 0	0 1 0	Aug. 1914
30000 California, s. e. Tavis. (21 sh.)	1 0 0	15 1/2	15 1/2	0 2 0	0 1 0	Aug. 1913
20000 Cape Copper Mining, s. e. Tavis. (21 sh.)	5 0 0	44 1/2	43 1/2	88 17 0	1 0 0	Sept. 1914
65000 Colorado United, s. e. Tavis. (21 sh.)	5 0 0	24 1/2	24 1/2	3 14 0	0 1 0	May 1913
50000 Compañia, s. e. Tavis. (21 sh.)	3 10 0	2 1/2	2 1/2	2 18 0	0 1 0	Sept. 1914
70000 English, s. e. Tavis. (21 sh.)	2 10 0	2 1/2	2 1/2	0 3 0	0 1 0	Mar. 1914
2000 Eng. Ann., s. e. Tavis. (21 sh.)	1 0 0	1 1/2	1 1/2	0 3 0	0 3 0	Apr. 1913
25000 Fortuna, s. e. Tavis. (21 sh.)	2 0 0	3 1/2	3 1/2	14 3 0	0 2 0	Sept. 1914
72000 Fortuna, s. e. Tavis. (21 sh.)	2 0 0	3 1/2	3 1/2	8 12 0	0 1 0	Dec. 1913
40000 La Plata, s. e. Tavis. (21 sh.)	1 0 0	5 1/2	5 1/2	0 6 0	0 7 0	Oct. 1913
50000 Linares, s. e. Tavis. (21 sh.)	3 0 0	2 1/2	2 1/2	19 13 0	0 3 0	Sept. 1914
20000 Marbella Iron Ore, s. e. Tavis. (21 sh.)	10 0 0	2 1/2	2 1/2	0 10 0	0 10 0	June 1914
185164 Mason & Barry, s. e. Tavis. (21 sh.)	10 0 0	10 1/2	10 1/2	3 15 0	0 15 0	Apr. 1914
30000 Montana, s. e. Tavis. (21 sh.)	2 0 0	1 1/2	1 1/2	0 0 0	0 0 0	Sept. 1914
50000 Quebrada, s. e. Tavis. (21 sh.)	10 0 0	3 1/2	3 1/2	0 9 0	0 2 0	May 1914
50000 Puncalluco, s. e. Tavis. (21 sh.)	4 0 0	3 1/2	3 1/2	2 0 0	0 2 0	May 1914
25000 Pitanguy, s. e. Tavis. (21 sh.)	0 10 0	1 1/2	1 1/2	0 1 0	0 1 0	Sept. 1913
1400 Pitanguy, s. e. Tavis. (21 sh.)	20 0 0	6 1/2	6 1/2	30 3 0	0 11 0	Dec. 1913
100000 Port Phillip, s. e. Tavis. (21 sh.)	1 0 0	4 1/2	4 1/2	14 2 0	0 10 0	Feb. 1913
50000 Rara Fortuna, s. e. Tavis. (21 sh.)	1 0 0	1 1/2	1 1/2	0 3 0	0 1 0	July 1913
54000 Richmond Consol., s. e. Tavis. (21 sh.)	5 0 0	3 1/2	3 1/2	14 18 0	0 5 0	Aug. 1914
24524 Rio Tinto, s. e. Tavis. (21 sh.)	10 0 0	95 1/2	94 1/2	5 8 0	0 1 0	Apr. 1914
25000 Ditto, s. e. Tavis. (21 sh.)	10 0 0	16 1/2	15 1/2	0 12 0	0 16 0	May 1914
40000 Santa Barbara, s. e. Tavis. (21 sh.)	0 10 0	6 1/2	6 1/2	6 2 0	0 10 0	June 1914
12000 Schwab Gully, s. e. Tavis. (21 sh.)	10 0 0	2 1/2	2 1/2	20 0 0	0 2 0	Apr. 1914
80000 Scottish-Australian Mining Co., s. e. Tavis. (21 sh.)	1 0 0	1 1/2	1 1/2	20 0 0	0 1 0	Apr. 1914
22500 Ditto, s. e. Tavis. (21 sh.)	0 10 0	1 1/2	1 1/2	2 6 0	0 6 0	Apr. 1914
40625 Sierra Buttes, s. e. Tavis. (21 sh.)	2 0 0	1 1/2	1 1/2	3 2 0	0 2 0	Apr. 1914
253000 St. John del Rey, s. e. Tavis. (21 sh.)	0 60 0	5 1/2	5 1/2	5 0 0	0 5 0	June 1914
160000 Tambora, s. e. Tavis. (21 sh.)	1 0 0	3 1/2	3 1/2	0 6 0	0 6 0	Aug. 1914
625000 Tharsis, s. e. Tavis. (21 sh.)	2 0 0	6 1/2	6 1/2	12 6 0	0 12 0	Sept. 1914
14000 Tolima, s. e. Tavis. (21 sh.)	5 0 0	6 1/2	6 1/2	5 12 0	0 5 0	Sept. 1914
6000 Ditto, s. e. Tavis. (21 sh.)	5 0 0	5 1/2	5 1/2	4 5 0	0 5 0	Sept. 1914
25000 Victoria, s. e. Tavis. (21 sh.)	1 0 0	5 1/2	5 1/2	0 13 0	0 2 0	Feb. 1913
124221 United Mexican, s. e. Tavis. (21 sh.)	9 17 6	3 1/2	3 1/2	0 2 0	0 2 0	May 1914
1000000 Victorine (Nevada, U.S.), s. e. Tavis. (21 sh.)	1 0 0	0 1/2	0 1/2	0 0 0	0 6 0	June 1914
15000 Western Andes, s. e. Tavis. (21 sh.)	5 0 0	5 1/2	5 1/2	4 16 0	0 10 0	Aug. 1914
21000 W. Prussian, s. e. Tavis. (21 sh.)	10 0 0	4 1/2	4 1/2	4 0 0	0 4 0	Apr. 1913
41000 York Pen., s. e. Tavis. (21 sh.)	1 0 0	5 1/2	5 1/2	0 3 0	0 3 0	May 1913

Have made calls since last dividend was paid.

## NON-DIVIDEND BRITISH MINES.

Shares.	Paid.	Last wk.	Clos. p.
25000 Aberduna,* i, Denbigh .....	1 10 0	—	—
12000 Anderton, s, c, t, Devonshire .....	1 2 6	34	34 34
12000 Assheton, i, Carnarvonshire*	5 0 0	—	—
3200 Blue Hills, s, c, St. Agnes .....	4 8 6	34	34 34
10000 Brada,* i, Isle of Man .....	1 0 0	—	—
30000 British,* s, i, Wrexham .....	1 0 0	—	—
20000 British Manganese Company*	1 0 0	—	—
20000 Bwlch United,* i, Cardigan .....	1 0 0	—	—
12000 Collacombe Consols, c, b, Llanerton .....	0 2 6	34	34 34
50000 Carn Camborne,* c, Camborne .....	1 0 0	34	34 34
37500 Carnvanshire Cons., i, Llanrwst .....	2 0 0	34	34 34
4000 Oashwell,* i, Cumberlan[d] .....	2 19 0	14	14 14
6000 Cathedral, c, t, Gwennap .....	1 12 0	—	—
12000 Central Foxdale,* i, Isle of Man .....	1 17 6	—	—
300000 Clifford Amalgamated .....	1 0 0	14	14 14
25000 Ood-y-Ped & Pant-y-ty .....	3 0 0	—	—
2450 Ood's Kitchen, t, Illogan .....	35 14 3	13	13 13
50000 Oreligion,* i, b, Denbighshire .....	0 17 0	34	34 34
35400 Crook Burn,* i, Cumberlan[d] .....	0 17 0	—	—
48723 D'Ersby Mountain, i, b, Llanrwst .....	0 10 0	34	34 34
12000 Derwent,* i, Durham .....	4 0 0	—	—
60000 Devon Friendship,* c, ar, Tavistock .....	1 0 0	34	34 34
12000 Devon Great United* (21. shares) .....	1 17 6	34	34 34
50000 Drakewalls,* t, c, Calstock .....	0 15 0	—	—
50000 Duchy Peru,* b, i, s, Cornwall .....	1 0 0	14	14 14
12000 East Blue Hills, t, St. Agnes .....	0 5 0	34	34 34
6000 East Botallack, t, St. Just .....	1 2 6	—	—
8144 East Caradon, t, St. Cleer .....	5 2 6	34	34 34
30000 E. Craven Moor,* i, Pateley Bridge .....	1 0 0	—	—
15000 East Devon Consols,* c, Buckfastleigh .....	2 0 0	34	34 34
20000 East Long Rake,* i, Wales .....	1 0 0	—	—
25500 East Roman Gravel,* i, Salop .....	1 0 0	—	—
18000 East Van, i, Llanidloes .....	1 0 0	—	—
2048 East Wheel Lovell, t, Helston .....	20 3 0	34	34 34
100000 East Wheel Rose,* s, i, Newlyn East .....	1 0 0	34	34 34
25000 Euton,* c, Wetton .....	1 0 0	1	1 14
12500 Frongoch,* i, Cardgn (1000 sh. iss.) .....	2 0 0	34	34 34
12000 Gawton,* c, Tavistock .....	2 5 0	34	34 34
40000 Glasgow, s, i, Devon .....	1 0 0	34	34 34
10000 Giddard,* i, c, Carnarvonshire .....	1 0 0	—	—
30000 Goginan,* t, Cardigan .....	1 2 0	34	34 34
25000 Goodever, t, St. Cleer .....	1 0 0	34	34 34
8000 Gorseaid and Merilyn Con., i, Flint .....	2 10 0	34	34 34
6000 Great West Chiverton, i, St. Agnes .....	0 8 6	34	34 34
30000 Great W. Shepherds,* i, Cornwall .....	1 0 0	—	—
20000 Grogwinion, i, Cardigan .....	2 0 0	—	—
10000 Gwyn-y-Mynydd,* s, i, Flint (pref.) .....	4 0 0	34	34 34
70000 Gwydyr Amal,* i, b, Carnarvon .....	1 0 0	—	—
3400 Hardshins,* i, Westmore. (10s. sh.) .....	0 7 6	1	1 14
12000 Herodfoot, i, near Liskeard .....	1 6 0	34	34 34
18000 Hington Down, c, Calstock*	0 13 0	34	34 34
35000 Holway Consols,* i, Flintshire .....	1 0 0	—	—
25000 Kit Hill Gt. Cons., s, ar, m, (21. sh.) .....	1 2 6	34	34 34
15000 Lady Ann,* s, i, Llanarnon .....	1 0 0	—	—
25000 Llandegla,* i, Wales .....	1 0 0	—	—
5120 Lovell, t, Wendron .....	1 8 0	34	34 34
3000 Marke Valley, c, Llaninhorne .....	7 14 6	34	34 34
30000 Mona,* c, Anglessea .....	5 0 0	—	—
20000 Mona Consols,* c, Anglessea .....	1 0 0	—	—
20000 Mostyn Consols,* s, i, Flint .....	1 0 0	—	—
2000 Morfa Du, s, g, s, Anglessea*	1 0 0	—	—
80000 Mounts Bay,* c, t, Breage .....	1 0 0	34	34 34
8144 Mount Carbis, t, c, Redruth .....	1 19 0	2	2 34
2000 New Caradon, c, St. Cleer .....	0 6 0	14	14 14
2400 New Ood's Kitchen, t, Illogan .....	10 5 6	14	14 14
8000 New Dolcoath, s, c, Camborne*	3 0 0	—	—
10000 New Holmbush,* t, c, Oallington .....	4 0 0	—	—
6000 New Killy, t, St. Agnes .....	1 9 0	14	14 14
25000 New Langford,* s, c, Oallington .....	9 2 6	34	34 34
15000 New Redmoor,* ar, Oallington .....	1 5 0	34	34 34
17500 New Terras,* t, St. Austell .....	2 0 0	34	34 34
3500 New Tincroft,* i, Lelant .....	0 0 0	—	—
12000 New Trumpett,* i, Wendron .....	1 0 0	1	1 14
10000 New Van Cons. & Glyn.* .....	7 0 0	—	—
2000 New West Caradon, c, Liskeard .....	0 7 6	34	34 34
2000 New Wheel Peveror, t, Redruth .....	0 10 0	—	—
4000 North Blue Hills, t, St. Agnes .....	0 2 6	24	24 24
5300 North Bury, t, c, Scortor i, s .....	2 4 0	44	44 44
2000 North Cornish,* s, i, Cornwall .....	1 0 0	—	—
2000 North Goginan,* i, Cardigan .....	1 0 0	—	—
4000 North Green Hurth,* .....	1 0 0	34	34 34
12000 North Grogwinion,* s, i, Cardigan .....	1 0 0	34	34 34